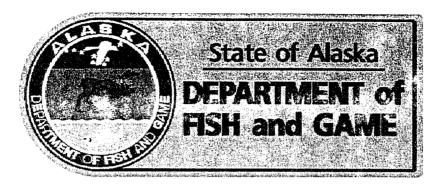
ABUNDANCE, AGE, SEX, AND SIZE STATISTICS FOR SOCKEYE, CHUM AND PINK SALMON IN LOWER COOK INLET, 1998



by
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and
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Abstract

Aerial and foot surveys were used to estimate the 1998 sockeye *Oncorhynchus nerka*, chum *O. keta*, and pink *O. gorbusca* salmon escapements in the Lower Cook Inlet management area. Age, length and weight samples were obtained from five sockeye salmon stocks. A total of 284,029 sockeye, 4,647 chum and 1,457,819 pink salmon were harvested in this management area. Another 73,615 sockeye, 114,737 chum, and 918,406 pink salmon were estimated in the spawning escapement. The dominant ages of sockeye salmon throughout Lower Cook Inlet were 1.2 and 1.3. The proportion of sockeye salmon males ranged from a low of 25.6% in the Grouse Lake escapement sample to a high of 46.70% in the China Poot Bay sample. Sockeye salmon ranged in mean size from 482 mm in China Poot Bay to 533 mm in the commercial catch at Desire Lake and from 1.73 kg at Grouse Lake to 1.81 kg at Bear Lake.

KEY WORDS: Age, chum salmon, escapement, length, Lower Cook Inlet, pink salmon, Oncorhynchus, sex, sockeye salmon, weight.

INTRODUCTION

The Lower Cook Inlet (LCI) Management Area for commercial salmon fishing is composed of all waters west of Cape Fairfield in the Gulf of Alaska, north of Cape Douglas in Shelikof Straits, and south of Anchor Point in Cook Inlet. The area is divided into five management districts: Kamishak Bay, Barren Islands, Southern, Outer, and Eastern (Figure 1); fishing does not occur in the Barren Islands District. Purse seines and set gillnets are the only legal commercial gear types for salmon. Entry into the commercial fishery was limited in 1972.

In 1961, the Alaska Department of Fish and Game (ADF&G) began documenting LCI commercial catches of the five Pacific salmon species that occur in Alaska. Sockeye *Oncorhynchus nerka* and chum salmon *O. keta* catch sampling for age, weight, length (AWL) and sex began in 1970. AWL data between 1970 and 1986, and between 1988 and 1997, has been summarized by Schroeder (1984, 1985, 1986), Morrison (1987), Yuen et.al. (1989, 1990, 1991, 1992), Yuen and Bucher (1994a, 1994b, 1995) Otis, Bechtol and Bucher (1998), Otis and Dickson (1999a) and Otis and Dickson (1999b). There was no catch-sampling program in 1987. Aerial and ground escapement surveys of pink salmon *O. gorbusca* began in 1960, chum salmon in 1974, and sockeye salmon *O. nerka* in 1969. Annual escapement data are summarized in annual management reports for the Lower Cook Inlet Area (eg., Bucher and Hammarstrom 1999).

Historically, fishing for a single species within a bay or drainage has lasted three to six weeks. Sockeye salmon fisheries begin as early as June while pink and chum salmon fisheries begin in July. Both fisheries end in August. Commercial fishing for chinook *O. tshawytscha* has begun as early as May and fishing for coho *O. kisutch* has extended into September. Current management strategy is structured around established fishing districts and sub-districts to facilitate management of discrete stocks. Commercial harvests are managed to meet predetermined escapement goals and to obtain adequate escapement for all run segments of a stock.

The purpose of the Lower Cook Inlet salmon catch-sampling program is to collect sockeye and chum salmon AWL data from purse seine fisheries that target discrete stocks. These single-stock fisheries normally account for over 90% of the total sockeye and chum catch from Lower Cook Inlet. The purse seine fisheries in Halibut Cove, Tutka Bay and Douglas River subdistricts, and the three set gillnet fisheries in Lower Cook Inlet were not sampled because they did not target specific local stocks. Chinook salmon samples also were not collected because total chinook salmon harvest is typically <1% of the total salmon catch. The coho and pink salmon catches normally are not sampled because they exhibit little inter-annual age composition variation.

This report summarizes the 1998 estimates of age and size composition of samples obtained from two discrete sockeye salmon fisheries and three sockeye salmon spawning populations. Monitoring changes in age composition allows fishery managers to prepare preseason forecasts of abundance and evaluate spawning escapement goals. This report also summarizes methods used to estimate total escapement from aerial and ground surveys.

METHODS

The Lower Cook Inlet salmon harvest has been managed as 16 independent purse seine fisheries, most of which target discrete stocks of sockeye, pink or chum salmon, each with their own escapement goal. Individual stocks occurred within distinct geographical sampling strata (Figure 2).

Most catch samples were obtained dockside when tenders were delivering catches from a single fishery. If tenders were expected to gather fish from several fisheries before returning to port, then samples were obtained aboard the tender before salmon from the targeted fishery were placed in the hold. The catch sampling crew interviewed the fishers delivering salmon to determine the origin of the catch before taking samples. If none of the above were possible then samples were obtained from a tender hold provided the skipper was interviewed to confirm that no salmon from an earlier sampling period were present.

There were several chum salmon runs which, due to expected low returns, were closed to commercial fishing this year. A small commercial catch (3,950 fish) occurred in the set gill net fishery in Seldovia Bay. Consequently, there were no chum AWL samples collected. Sockeye salmon age composition estimates were based on samples taken from two commercial fisheries (China Poot Bay and Desire Lake) and from the escapement at Bear, Grouse and Delight Lakes. Escapement samples were collected at Delight Lake for the second consecutive year while the Chenik Lake adult weir was discontinued due to low returns.

Salmon were measured from mid-eye to fork of tail $(\pm 1 \text{ mm})$ using a $Limnoterra^2$ electronic fish measuring board (FMBIV). An $Ohaus^2$ (Model CT6000-S) electronic balance was used to weigh salmon to the nearest gram. Sex was generally determined from external secondary sexual characteristics (e.g. kipe, humped back, etc.). If necessary, a small incision near the vent was made to inspect the gonads and confirm the sex.

Scales were collected from commercial catch and escapement sampled fish to determine age. When possible, scales were collected from the *preferred area* of each salmon: an area 2-3 rows above the lateral line, posterior to the dorsal fin and anterior to the anal fin. Scales were cleaned and mounted ridged side up on a gummed card and then heat-pressed onto acetate cards for reading and archival. Images of scale impressions were magnified 35x and projected on a microfiche reader so the number of annuli per scale could be counted to determine age.

We used the European age designation system (Koo 1962). The first digit in this system refers to the number of freshwater annuli, the second digit refers to the number of marine annuli, and the total age is the sum of the two digits plus one. For example an age-1.2 salmon is a 4-year old salmon that spent 2 years in fresh water (first winter spent in the gravel as an alevin) and 2 years at sea.

²Vendor or product names are provided to document methods and do not constitute endorsement by ADF&G.

Age composition sample sizes for scale collection were set for each sampling stratum to estimate age proportions p_i from a population of k age groups simultaneously within a specified distance d of their true population age proportion π_i 90% of the time (1- α). That is,

$$Pr(\bigcap_{i=1}^{k} |p_i - \pi_i| \le d) \ge 1 - \alpha,$$

where d and α were respectively chosen to be 0.05 and 0.10 for all scale samples; $\alpha_i = 2(1 - \Phi(z_i))$, $\Sigma \alpha_i < \alpha$, $\Phi(z_i) =$ area under the standard normal distribution: and $z_i = d \sqrt{n_i} \sqrt{p_i(1-p_i)}$. Thompson (1987) calculated a maximum sample size of 403 for a worse-case scenario when three age groups were present in equal numbers, where d = 0.05 and $\alpha = 0.01$. Any deviation in the number of age groups or unequal contributions by age group would require a smaller sample size.

Sample sizes for mean weights ranged between 5 and 50 depending on σ . Most sample sizes were around 20 for a 200-salmon sample, or 1 in 10 salmon of each sex.

Estimates of standard errors by age group were derived according to procedures for stratified random sampling described by Snedecor and Cochran (1967):

$$SE = \sqrt{\sum_{h} C_h^2 \frac{S_h^2}{n_h}},$$

where C_h = the salmon catch in the hth stratum, and s_h^2 = the sample variance in the hth stratum. Catch totals were obtained from harvest receipts (commonly referred to as fish tickets) which must be used to document each landing by a licensed fisher.

All pink and chum and most sockeye salmon escapement estimates in Lower Cook Inlet were based on periodic counts made by an observer either flying in a fixed-wing aircraft or walking along selected streams (Tables 1, 2 and 3). Sockeye salmon escapement estimates for English Bay, Delight, Desire and Chenik Lakes were based on counts made at weirs.

Pink and chum salmon generally accumulated in surveyed streams over time, however, many often died before the last survey was completed. Therefore, survey counts were usually adjusted for steam life: the average length of time a spawning pink or chum salmon was alive and available to surveyors. Our method of considering stream life in estimating total pink and chum salmon escapements was similar to that described by Johnson and Barrett (1988). First, daily surveys were converted to fish-days:

$$fish - days = \frac{(x_i + x_{i-1})}{2} (d_i - d_{i-1}),$$
 3

3

where d_i = Julian calendar date of survey i (1<d < 365) and x_i = number of live pink or chum salmon observed in the study stream during survey I. Then, the area under the fish-day curve is found by intergration:

$$area = \sum_{i=1}^{n+1} \frac{(x_i + x_{i-1})}{2} (d_i - d_{i-1}),$$

where n = total number of surveys, $x_0 = x_{n+1} = 0$. Pink and chum salmon were not expected to enter streams before 1 July ($d_o = \text{Julian}$ date 191) or after 15 September ($d_n + 1 = \text{Julian}$ date 258) unless otherwise noted.

Finally, dividing fish-days by stream life, in this case 17.5 d, yielded total escapement in numbers of salmon:

escapement =
$$\frac{\sum_{i=1}^{n+1} \frac{(x_i + x_{i-1})}{2} (d_i - d_{i-1})}{17.5}.$$

If this estimate was less than the greatest number of salmon observed on any one survey, we used the peak survey count instead of the result from equation (5) as the total escapement estimate. If both aerial and ground surveys were available, we selected the survey we believed to be the most accurate estimate of total escapement. Sockeye salmon tended to accumulate in surveyed lakes and most were often still alive after the last spawning surveys were completed. Accordingly, peak counts were used as an escapement index for this species, unless otherwise noted.

RESULTS

In 1998, Lower Cook Inlet salmon harvests included 284,029 sockeye, 4,647 chum, and 1,457,819 pink salmon; total escapements were estimated to be 73,615 sockeye, 114,737 chum, and 918,406 pink salmon (Tables 4, 5, and 6 respectively).

Sockeye salmon catch or escapement age, weight, and length (AWL) samples were collected in three commercial fishing districts: Southern, Outer, Eastern (salmon do not return to streams in the Barren Islands District). Samples from sockeye salmon fisheries were obtained between 3 June and 11 August. We were able to obtain AWL samples from the commercial catch or escapement from each sockeye stock in Lower Cook Inlet that was commercially fished in 1998 with the exception of Kirschner Lake and Neptune and Aialik Bays. One of the two catch samples met or exceeded the 90% confidence level where d = 0.05. Three escapement samples (Delight, Grouse and Bear Lakes) also met this criterion. A total of 2,602 readable scales was collected (Table 7).

Southern District Sockeye Salmon

The only Southern District fisheries assumed to be harvesting discrete sockeye salmon stocks occur in China Poot and Neptune bays. The runs originating from Leisure Lake, which drains into China Poot Bay, and Hazel Lake, which drains into Neptune Bay, supported the 2 largest sockeye fisheries in Lower Cook Inlet in 1998. Both of these runs were enhanced by ongoing lake stocking programs that began in 1976 and 1988 respectively. The 1998 common property commercial fisheries in China Poot and Neptune bays harvested 61,154 and 18,488 sockeye salmon respectively. Cost recovery efforts accounted for additional 19,294 and1,285 sockeye salmon at China Poot and Neptune Bay respectively. Biological data on sockeye salmon returning to China Poot and Neptune bays have been collected since 1980 and 1993 respectively (Appendix A). The mean sockeye weight in our China Poot catch sample was 1.77 kg (n = 51) and the mean length was 482 mm (n = 533). The China Poot catch sample consisted of 89.5% age-1.2 sockeye salmon and 53.3% females (Table 8). The Neptune Bay fishery was not sampled in 1988. Since a barrier falls prevents upstream spawning migration into Leisure Lake, efforts were made to harvest all returning sockeye salmon in that terminal fishery.

The Halibut Cove purse seine and set gill net fishery exploits mixed stocks and harvested 62,301 sockeye salmon in 1998. Mixed stocks were also harvested in various set gillnet fisheries. The reported harvest of sockeye salmon near Barabara Creek was 1,288; 8,480 sockeyes were harvested in Kasitsna/Tutka bays, and 6,038 in Seldovia Bay. The common property fishery at English Bay reported a catch of 8,080 while the only large spawning escapement of sockeye salmon in the Southern District occurred in the English Bay River drainage where 14,136 sockeye salmon passed through the weir and an additional 6,202 sockeyes were harvested for the cost recovery program (Paul McCollum, Port Graham Hatchery Manager, personal communication).

Outer District Sockeye Salmon

Wild runs in Nuka Bay supported a commercial harvest of 15,986 sockeye salmon in 1998. Biological data on sockeye salmon returning to Nuka Bay have been collected since 1984 (Appendix B). Escapement scale samples were obtained from 491 sockeye salmon in Delight Lake from 7 July to 19 July. Delight Lake had a escapement index of 9,154 sockeye salmon. The sample from this lake consisted of 33.6% age-1.2 and 55.4 % age-1.3 sockeye salmon with an overall mean length of 526 mm (n=491; Table 9). A sample of fish from the commercial catch at Desire Lake collected on 17 July was dominated by age-1.3 (65.0%), the overall average length was 533 mm; (n=104, table 10). Desire Lake had an escapement index of 7,880 sockeyes; 1,090 sockeye salmon were estimated to have escaped into Delusion (a.k.a. Ecstasy Lake).

Eastern District Sockeye Salmon

The sockeye return to Aialik Lake supported a commercial harvest of 8,568 fish while the escapement index was estimated to be 4,900 fish. Biological data on sockeye salmon returning to Aialik Lake have been collected since 1983 (Appendix C) however, no AWL samples were collected in 1998.

The enhanced run in Resurrection Bay supported a common property commercial harvest of 1,229 sockeyes and a hatchery cost recovery harvest of 30,172 fish; 6,487 sockeye salmon were counted through the weir into Bear Lake (Jeff Hetrick, CIAA, personal communication). The Bear Creek escapement sample (n = 1,200) consisted of 83.4% age-1.2 fish at 479 mm and 14.5% age-1.3 fish at 525 mm (Table 11). The Grouse Lake Sockeye salmon enhancement project produced an estimated 13,400 sockeyes all of which were harvested for cost recovery purposes. The escapement sample (n=254) taken at the Grouse Lake weir consisted of 74.4% females. The overall predominant age class was age-1.3 fish (76.40%) which had a mean length of 518 mm (Table 12).

Kamishak Bay District Sockeye Salmon

No sockeye salmon samples were collected in the Kamishak Bay district in 1998. The Chenik Lake Subdistrict remained closed due to the small run of 1,880 sockeye salmon. The Chenik Lake weir (in operation since1989) was not installed and the sockeye escapement was estimated by means of aerial survey. Chenik Lake's natural run was supplemented with hatchery-reared sockeye juveniles as early as 1978, however, the run has been extremely weak in recent years due to an IHN epizootic. Biological data on sockeye salmon returning to Chenik Lake have been collected since 1985 (Appendix D).

The escapement at Mikfik Lake was estimated at 12,630 sockeye salmon. There were no commercial fishing efforts directed at Mikfik stocks even though the fishery was opened. The common property fishery at Kirschner Lake produced 8,112 sockeyes; 19,390 sockeyes were harvested for cost recovery goals.

Escapement indices to other Kamishak District streams included 1,000 sockeyes in Ursus Cove Lagoon Creek, 405 in Bruin River, and 4,140 in Amakdedori Creek.

Lower Cook Inlet Chum Salmon

A combination of poor market conditions and reduced returns to most drainages continued to precluded many fishers from targeting chum salmon in 1998. The majority of the commercial chum salmon catch (3,956 fish caught in the Southern District) was incidental to other fisheries. Consequently no chum salmon AWL samples were collected. The LCI commercial chum salmon harvest of 4,647 fish (Table 5.) represented less than 5% of the 20-year average and marked the eighth successive below-average season in Lower Cook Inlet. The McNeil River chum escapement (estimated at 23,530 fish) surpassed the low end of its escapement goal range of 20,000 to 40,000 fish for only the second time since 1989.

Lower Cook inlet pink salmon

Virtually all pink salmon exhibit a two-year life cycle so catch samples typically are not collected to determine age composition of returning stocks. However, catch and escapement data are compiled to facilitate in-season management of the commercial fishery and to forecast the following years return (Otis 1997). In contrast with last years 2,814,431 pink salmon harvest, the 1998 harvest decreased to 1,457,819 (Table 6). Over 90% of the total harvest occurred in the Southern District largely as a result of Tutka Hatchery production (Table 6). Over 71% of the Southern District catch went to Tutka Hatchery cost recovery and brood stock collection; the common property harvest totaled 504,759 fish. Only 13 of 23 pink salmon streams that were monitored for escapement achieved their desired escapement levels; 3 of 6 index streams in the Southern District attained the minimum escapement goal.

Discussion

Sockeye salmon mean lengths and weights within a brood year are expected to increase with increasing ocean age. For example, age-1.1, and 1.3 Aialik Lake male sockeye salmon from the 1980 brood year had mean lengths progressing from 355 mm to 515 mm to 569 mm (Appendix C). Whenever this trend was not observed, data were examined for keypunch errors, and scales were reexamined for aging errors. Some apparent size trend discrepancies resulted from sampling inadequacies. For instance, the mean weight of age-1.3 sockeye salmon from China Poot Bay was 2.09 kg, while age-2.3 sockeyes weighed only 1.95 kg (Table 8). This apparent discrepancy was probably not due to aging or keypunch errors. It was more likely related to both samples consisting of just one fish each, which, by itself did not provide a representative sample for it's age group.

Occasional anomalies occurred in the freshwater residency period for some stocks. For example, age-1. fish has dominated Aialik Bay returns since catch sampling began there in 1983. However, 52.9% and 65.5% of juvenile sockeye remained in Aialik Lake a second year and smolted as age-2. fish in 1990 and 1991, respectively. East Nuka Bay returns experienced similar occurrences in 1988 and 1994. Inter-annual variation in age compositions is relatively common within sockeye salmon stocks Burgner (1991), however, casual mechanisms are not fully understood. While size may not be the sole determinant for smoltification, Weatherly and Gill (1995), report that growth is an important component influencing the duration of freshwater residence of sockeye salmon. Burgner (1991) lists several factors which may influence the freshwater growth of sockeye salmon, including: abundance and availability of food, temperature conditions, length of growing season, intensity of available light, competition, disease, feeding behavior in relation to predators, and movements to favorable habitats for feeding and survival.

While the overall sex ratio of returning adult salmon is typically even, males generally dominate the early portion of a run and females the latter, particularly for chum and pink salmon. Thus, the date samples are collected relative to the timing of the spawning run can influence the observed sex ratio of the sample. This temporal bias probably caused the skewed sex ratio observed in the 1998 sample from Grouse Lake (74.4% females; Table 12). Most of these samples were collected on late in the Grouse Lake return. Because temporal biases occur and size-at-age differences exist between male and female sockeye salmon (Burgner 1991), sampling dates are reported and age-weight-length data are stratified by sex in the appendices.

Escapement indices reported herein are primarily based on area-under-the-curve estimates that incorporate a 17.5 day streamlife. This streamlife estimate has been used for Lower Cook Inlet pink salmon for almost 30 years (Davis and Valentine 1970). While streamlife is recognized as a dynamic parameter, often varying by sex, segment of the run, and year, recent pink salmon streamlife work conducted in Prince William Sound suggests 17.5 days may be outside the commonly observed range of values (Bue et al. 1998). Until streamlife studies are conducted to confirm these data for Lower Cook Inlet streams, we are reluctant to modify our escapement indices. Nonetheless, readers should be aware that the historical escapement indices presented in this document could change in the future when a more appropriate streamlife estimated is adopted for Lower Cook Inlet pink and chum salmon.

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Table 1. Survey methods and total escapement algorithms used for sockeye salmon streams in Lower Cook Inlet, 1998.

| Stream | m Survey Total Escapement Algorithm Method | | | | |
|-----------------------|--|--------------------------|--|--|--|
| | Southern District | | | | |
| English Bay | Weir | Sum of daily weir counts | | | |
| | | Outer District | | | |
| Desire Lake | Aerial | Peak live count | | | |
| Delight Lake | Aerial | Peak live count | | | |
| Delusion Lake | Aerial | Peak live count | | | |
| | | Eastern District | | | |
| Aialik Lake | Aerial | Peak live count | | | |
| Salmon Creek | Ground | Peak live count | | | |
| Grouse Creek | Ground | Peak live count | | | |
| Bear Creek | Weir | Sum of daily weir counts | | | |
| | | Kamishak District | | | |
| Ursus Lagoon | Aerial | Peak live count | | | |
| Bruin Lake Creek | Aerial | Peak live count | | | |
| Bruin Bay | Aerial | Peak live count | | | |
| Amakdedori Creek | Aerial | Peak live count | | | |
| Chenik Lake | Aerial | Peak live count | | | |
| Paint River | Aerial | Peak live count | | | |
| Mikfik Lake | Aerial | Peak live count | | | |
| Little Kamishak River | Aerial | Peak live count | | | |
| Douglas Reef | Aerial | Peak live count | | | |

Table 2. Survey methods and total escapement algorithms used for chum salmon streams in Lower Cook Inlet,1998.

| Stream Sur Met | | Total Escapement Algorithm | Start/stop dates Area-under-the-curve |
|------------------------|--------|----------------------------|--|
| | | Southern District | |
| Humpy Creek | Ground | 17.5 day streamlife | 7/1-9/15 |
| Seldovia Creek | Ground | 17.5 day streamlife | 7/1-9/15 |
| Port Graham Left | Ground | Peak live & carcass count | |
| Port Graham River | Ground | 17.5 day streamlife | 7/1-9/20 |
| | | Outer District | |
| Dogfish Bay | Ground | 17.5 day streamlife | 7/1-9/15 |
| Port Chatham | Ground | 17.5 day streamlife | 7/1-9/15 |
| Windy River Left | Ground | 17.5 day streamlife | 7/1-9/15 |
| Windy River Right | Ground | 17.5 day streamlife | 7/1-9/15 |
| Rocky River | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Port Dick: | | · | |
| Head End Creek | Ground | 17.5 day streamlife | 7/1-9/20 |
| Slide Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Middle Creek | Aerial | 17.5 day streamlife | 7/1-9/20 |
| Island Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Petrof River | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Nuka Island, South Cr. | Ground | 17.5 day streamlife | 7/1-9/15 |
| James Lagoon | Aerial | 17.5 day streamlife | 7/1-9/15 |
| | | Eastern District | |
| Tonsina Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Tonsina Left Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Salmon Creek | Ground | Peak carcass count | |
| Clear Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Sawmill Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Spring Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| | H | Kamishak Bay District | |
| Ininskin River | Aerial | 17.5 day streamlife | 7/25-9/30 |
| Sugarloaf Creek | Aerial | 17.5 day streamlife | 7/27-9/30 |
| North Head Creek | Aerial | 17.5 day streamlife | 7/27-9/30 |
| Cottonwood Creek | Aerial | 17.5 day streamlife | 8/1-9/30 |
| Browns Peak Creek | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Ursus Lagoon, Rt. hand | Aerial | 17.5 day streamlife | 7/26-9/30 |

Table 2. cont'd page 2 of 2

| Stream Survey Method | | Total Escapement Algorithm | Start/stop Dates Area-Under- Curve | |
|---------------------------|--------|----------------------------|--|--|
| | Kam | ishak Bay District | | |
| Ursus Lagoon (Rt hand) | Aerial | 17.5 day streamlife | 7/15-9/30 | |
| Ursus Lagoon Creek | Aerial | 17.5 day streamlife | 7/15-9/30 | |
| Sunday Creek | Aerial | 17.5 day streamlife | 7/1-9/15 | |
| Bruin Bay River | Aerial | 17.5 day streamlife | 7/1-9/15 | |
| McNeil River ^a | Aerial | 17.5 day streamlife | 6/20-9/15 | |
| Little Kamishak River | Aerial | 17.5 day streamlife | 7/1-9/15 | |
| Strike Creek | Aerial | 17.5 day streamlife | 7/1-9/15 | |
| Big Kamishak River | Aerial | 17.5 day streamlife | 7/1-9/15 | |
| Douglas Reef | Aerial | 17.5 day streamlife | 7/1-9/15 | |
| Douglas Beach | Aerial | 17.5 day streamlife | 7/1-9/15 | |

^a McNeil River Chum salmon aerial survey counts are only considered to be an index of abundance. In some years, the estimated number of salmon consumed by bears in McNeil River Wildlife Sanctuary has exceeded the peak aerial survey count.

Table 3. Survey methods and total escapement algorihims used for pink salmon streams in Lower Cook Inlet, 1998.

| Stream | Survey Method | Total Escapement Algorithm | Start/stop Dates Area-Under-Curve |
|--------------------------|------------------|-------------------------------|--------------------------------------|
| | Sout | hern District | |
| Humpy Creek | Ground | 17.5 day streamlife | 7/15-9/15 |
| China Poot Creek | Ground | 17.5 day streamlife | 8/1-9/25 |
| Tutka Creek | Ground | 17.5 day streamlife | 7/1-/9/30 |
| Seldovia River | Ground | 17.5 day streamlife | 7/1-9/20 |
| Barabara Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Port Graham left | Ground | 17.5 day streamlife | 8/1-9/30 |
| Port Graham River | Ground | 17.5 day streamlife | 8/1-9/30 |
| | Ou | ter District | |
| Dogfish Bay | Ground | 17.5 day streamlife | 7/1-9/15 |
| Port Chatham | Ground | Peak live&carcass count | |
| Chugach Bay | Aerial | 17.5 day streamlife | 7/1-9/30 |
| Windy River Left | Ground | 17.5 day streamlife | 7/10-9/30 |
| Windy River Right | Ground | • | 7/10-9/30 |
| Scurvy Creek | Ground | 17.5 day streamlife | 7/1-9/15 |
| Rocky River | Ground | 17.5 day streamlife | 7/1-9/15 |
| Port Dick: | | | |
| Head End Creek | Ground | 17.5 day streamlife | 7/15-9/30 |
| Slide Creek | Ground | 17.5 day streamlife | 7/15-9/30 |
| Middle Creek | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Island Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Nuka Island, South Creek | Ground | 17.5 day streamlife | 7/15-9/20 |
| Berger Bay | Ground | 17.5 day streamlife | 7/1-9/15 |
| James Lagoon | Ground | 17.5 day streamlife | 7/1-9/15 |
| | Eas | tern District | |
| Humpy Cove | Ground | Peak live & carcass count | |
| Tonsina Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Tonsina Left Creek | Ground | 17.5 day streamlife | 8/1-9/30 |
| Salmon Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Grouse Creek | Ground | Peak live & carcass count | |
| Lost Creek | Ground | Peak live & carcass count | |
| Sawmill Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Spring Creek | Ground | 17.5 day streamlife | 7/1-9/30 |
| Thumb Cove | Ground | 17.5 day streamlife | 7/1-9/30 |

Table 3 cont'd (page 2 of 2)

| Stream | Survey | Total Escapement Algorithm | Start/stop Dates Area-Under-Curve |
|-------------------------|---------|-------------------------------|--------------------------------------|
| | Kamisha | k Bay District | |
| Sugarloaf Creek | Aerial | Peak live count | |
| North Head Creek | Aerial | 17.5 day streamlife | 8/1-9/15 |
| Browns Peak Creek | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Ursus Lagoon Right-hand | Aerial | Peak live count | |
| Ursus Lagoon | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Sunday Creek | Aerial | 17.5 day streamlife | 7/1-9/15 |
| Bruin Bay Creek | Aerial | Peak live count | |
| Amakdedori Creek | Aerial | 17.5 day streamlife | 7/1-9/15 |

Table 4. Commercial sockeye salmon catches (including hatchery cost recovery) and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1998.

| Subdistrict/System | Catch | Escapement | Total Run |
|-----------------------------------|---------|------------|-------------------|
| SOUTHERN DISTRICT | | V | |
| Northshore Subdistrict | | | |
| Clearwater Slough | | 6 | |
| Helicopter Creek | | 20 | |
| Total Run | | | 26 |
| Humpy Creek | | 408 | 408 |
| Halibut Cove | 62,301 | | 62,301 |
| China Poot Bay | 04.454 | | |
| Common Property Fishery | 61,154 | | |
| Hatchery Cost Recovery | 19,294 | 300p | |
| China Poot Creek Total Run | | 380⁵ | on one |
| Neptune Bay | | | 80,828 |
| Common Property Fishery | 18,488 | | |
| Hatchery Cost Recovery | 1,285 | | |
| "Waterfall" Creek | 1,200 | 12 | |
| "Oxbow" Creek | | 325 | |
| Total Run | | | 20,110 |
| Tutka/Kasitsna Bays & Tutka Creek | 8,480 | 439 | 8,919 |
| Barabara Creek | 1,288 | | 1,288 |
| Seldovia Bay | 6,038 | 8 | 6,046 |
| Port Graham | 3,652 | | 3,652 |
| English Bay | | | |
| Common Property Fishery | 8,080 | | |
| Hatchery Cost Recovery | 6,202 | . 44.4000 | |
| English Bay Lakes | | 14,136° | |
| Hatchery Broodstock | | 1,296 | 29,714 |
| Total Run SOUTHERN DISTRICT TOTAL | 196,262 | 17,030 | 29,714 213,292 |
| SOUTHERN DISTRICT TOTAL | 190,202 | 17,030 | 2 10,202 |
| OUTER DISTRICT | | | |
| Koyuktolik (Dogfish) | | 1 | 1 |
| Port Chatham | 5 | 1 | 6 |
| Windy Left | | 2 | 2 |
| Port Dick | | | |
| Head End | | 6 | |
| Island Creek | | 1 | |
| Total Run | | | 7 |
| | | | |

-continued-

Table 4. (page 2 of 2)

| Subdistrict/System | Catch | Escapement ^a | Total Run |
|--|----------------------|-------------------------|-----------|
| OUTER DISTRICT (continued) | | | |
| East Arm Nuka Bay (McCarty Fiord) | 15,986 | | |
| Delight Lake | | 9,154 ^d | |
| Desire Lake | | 7,880 | |
| Delusion Lake | | 1,090 | |
| Total Run | 45.004 | 40.405 | 34,110 |
| OUTER DISTRICT TOTAL | 15,991 | 18,135 | 34,126 |
| EASTERN DISTRICT | | | |
| Aialik Bay & Aialik Lake | 8,568 | 4,900 | 13,468 |
| Resurrection Bay North | 4.000 | | |
| Common Property Fishery | 1,229 | | |
| Hatchery Cost Recovery | 30,172 | | |
| Hatchery Discards/Donations | 4,305 | C 4070 | |
| Bear Lake Escapement Hatchery Brood Stock | | 6,487° 1,944 | |
| Bear/Salmon Creeks | | 1,944 1,094 | |
| Lost Creek | | 900 | |
| Grouse Creek | | 840 | |
| Total Run | | 0-10 | 46,971 |
| EASTERN DISTRICT TOTAL | 44,274 | 16,165 | 60,439 |
| KAMISHAK BAY DISTRICT | | | |
| Ursus Cove Lagoon Creek | | 1,000 | 1,000 |
| Kirschner Lake | | | |
| Common Property Fishery | 8,112 | | |
| Hatchery Cost Recovery | 19,390 | | |
| Total Run | | | 27,502 |
| Bruin Bay | | 000 | |
| Bruin Lake Creek | | 360 ^b | |
| Bruin Bay River | | 405 | 765 |
| Total Run | | | 765 |
| Chenik Lake Amakdedori Creek | | 4,140 | |
| Chenik Creek/Lake | | 1,880 | |
| Total Run | | 1,000 | 6,020 |
| Paint River | | 1,870° | 1,870 |
| McNeil Cove (Mikfik Creek/Lake) | | 12,630 | 12,630 |
| KAMISHAK BAY DISTRICT TOTAL | 27,502 | 22,285 | 49,787 |
| TOTAL LOWER COOK INLET | 284,029 | 73,615 | 357,644 |
| Escapement estimates derived from limited aerial s | surveys. Numbers rep | | |
| No freshwater escapement, prevented by barrier fa Weir counts. | IIS. | | |
| Weir counts and video images. | | | |
| No freshwater escapement, ladder not opened during | ng 1998. | | |

Table 5. Commercial chum salmon catches and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1998.

| Subdistrict/System | Catch | Escapement ^a | Total Run |
|----------------------------|------------------|-------------------------|-----------|
| SOUTHERN DISTRICT | | | |
| Humpy Creek | | 101 | 101 |
| Halibut Cove | 71 | 101 | 71 |
| China Poot Bay | 15 | | 15 |
| Tutka Bay | 852 | | 852 |
| Barabara Creek | 422 | | 422 |
| Seldovia Bay & River | 1,789 | 3,058 | 4,847 |
| Port Graham & River | 463 | 5,092 | 5,555 |
| English Bay | 344 ^b | 0,002 | 344 |
| SOUTHERN DISTRICT TOTAL | 3,956 | 8,251 | 12,207 |
| OUTER DISTRICT | | | |
| Dogfish Bay | | 9,760 | 9,760 |
| Port Chatham | 127 | 494 | 621 |
| Windy Bay | | | |
| Windy Right Creek | | 606 | |
| Windy Left Creek | | 482 | |
| Total Run | | | 1,088 |
| Rocky Bay & River | 327 | 700° | 1,027 |
| Port Dick | 145 | | |
| Port Dick (head end) Creek | | 1,840 | |
| High Tech Creek | | 82 | |
| Well Flagged Creek | | 12 | |
| Slide Creek | | 367 | |
| Middle Creek | | 2,427 | |
| Island Creek | | 3,446 | |
| Total Run | | | 8,319 |
| Nuka Island/Petrof River | 0 | 462 | 462 |
| East Arm Nuka Bay | <u>12</u> | | 12 |
| OUTER DISTRICT TOTAL | 611 | 20,678 | 21,289 |
| EASTERN DISTRICT | | | |
| Aialik Bay | 51 | | 51 |
| Resurrection Bay North | 0 | 22 | |
| Sawmill Creek | | 66 | |
| Spring Creek | | 292 | |
| Tonsina Creek | | 3,224 | 0.500 |
| Total Run | | | 3,582 |
| EASTERN DISTRICT TOTAL | 51 | 3,582 | 3,633 |

-continued-

Table 5. (page 2 of 2)

| Subdistrict/System | Catch | Escapement* | Total Run |
|-------------------------------------|-----------------|-------------|-----------|
| KAMISHAK BAY DISTRICT | | | |
| Inisksin Bay | 0 | | |
| Iniskin River | U | 10 606 | |
| | | 18,626 | |
| Sugarloaf Creek North Head Creek | | 651 440 | |
| Total Run | | 440 | 40.747 |
| | 0 | 0.040 | 19,717 |
| Cottonwood Bay & Creek | 0 | 2,316 | 2,316 |
| Ursus Cove | 0 | 004 | |
| Brown's Peak Creek | | 394 | |
| Ursus Lagoon Right Creek | | 1,584 | |
| Ursus Cove Lagoon Creek | | 3,036 | |
| Total Run | | | 5,014 |
| Rocky Cove/Sunday Creek | 0 | 713 | 713 |
| Kirschner Lake | 29 ^d | | 29 |
| Bruin Bay & River | 0 | 9,439 | 9,439 |
| McNeil River | 0 | 23,530 | 23,530 |
| Kamishak/Douglas Reef | 0 | | |
| Big Kamishak River | | 7,122 | |
| Little Kamishak River | | 9,728 | |
| Douglas Reef Creek | | 586 | |
| Total Run | | | 17,436 |
| Douglas River/Douglas Beach Creek | 0 | 4,061 | 4,061 |
| KAMISHAK BAY DISTRICT TOTAL | 29 | 82,226 | 82,255 |
| TOTAL LOWER COOK INLET | 4,647 | 114,737 | 119,384 |

Escapement estimates are derived from periodic ground or aerial surveys with stream life factors applied.
 English Bay catches include 1 chum taken during hatchery sockeye cost recovery operations.
 Rocky River escapement considered minimal estimate; due to the large numbers of pinks in the system, visual enumeration of chums via aerial surveys was nearly impossible.
 Kirschner Lake catches include 9 chums taken during hatchery sockeye cost recovery operations.

Table 6. Commercial pink salmon catches (including hatchery cost recovery) and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1998.

| Subdistrict/System | Catch | Escapement ^a | Total Run |
|----------------------------|-----------------------------|-------------------------|--------------|
| SOUTHERN DISTRICT | | | |
| Humpy Creek | | 17 400 | 47.400 |
| Halibut Cove | 2,417 | 17,492 | 17,492 |
| China Poot Bay/Creek | 2,417 2,312 ^b | 5,653 | 2,417 |
| Neptune Bay | 957 | 3,003 | 7,965 957 |
| Tutka/Kasitsna Bays | 301 | | 937 |
| Common Property Fishery | 504,759 | | |
| Hatchery Cost Recovery | 792,542 | | |
| Hatchery Brood Stock | | 153,580 | |
| Tutka Lagoon Creek | | 17,473 | |
| Total Run | | , | 1,468,354 |
| Barabara Creek | 3,298 | 2,840 | 6,138 |
| Seldovia Bay & River | 7,398 | 31,535 | 38,933 |
| Port Graham | | | |
| Common Property Fishery | 598 | | |
| Hatchery Brood Stock | | 12,706 | |
| Port Graham River | | 12,559 | |
| Total Run | | | 25,863 |
| English Bay | 761 ^b | | 761 |
| SOUTHERN DISTRICT TOTAL | 1,315,042 | 253,838 | 1,568,880 |
| OUTER DISTRICT | | | ·• |
| Dogfish Bay | | 6,695 | 6,695 |
| Port Chatham | 9,435 | 22,162 | 31,597 |
| Chugach Bay | | 24,551 | 24,551 |
| Windy Bay | | | |
| Windy Right Creek | | 19,522 | |
| Windy Left Creek | | 12,934 | |
| Total Run | | | 32,456 |
| Rocky Bay | 35,003 | | |
| Scurvy Creek | | 260 | |
| Rocky River | | 164,961 | |
| Total Run | | | 200,224 |
| Port Dick | 2,387 | | |
| Port Dick (head end) Creek | | 57,082 | |
| High Tech Creek | | 1,343 | |
| Well Flagged Creek | | 638 | |
| Slide Creek | | 39,281 | |
| Island Creek | | 83,585 | 404.040 |
| Total Run | | | 184,316 |

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Table 6. (page 2 of 2)

| Subdistrict/System | Catch | Escapement ^a | Total Run |
|---|------------------|-------------------------|--------------|
| CUTED DISTRICT (| | | |
| OUTER DISTRICT (cont'd) Nuka Island/South Nuka Island Creek | 44 404 | 44.000 | 55.404 |
| East Arm Nuka Bay (McCarty Fiord) | 41,101 14,246 | 14,000 | 55,101 |
| Delight Lake | 17,240 | 300 | |
| Desire Lake | | 6,156 | |
| Delusion Lake | | 1,991 | |
| Total Run | 466.470 | | 22,693 |
| OUTER DISTRICT TOTAL | 102,172 | 455,461 | 557,633 |
| EASTERN DISTRICT | | | |
| Aialik Bay | 38,828 | 350 | 39,178 |
| Resurrection Bay North | 1 | | , |
| Bear/Salmon Creeks | | 13,230 | |
| Grouse Creek | | 180 | |
| Sawmill Creek Spring Creek | | 1,118 646 | |
| Tonsina Creek | | 2,327 | |
| Humpy Cove | | 1,180 | |
| Thumb Cove | | 21,032 | |
| Total Run | - | | 39,804 |
| EASTERN DISTRICT TOTAL | 38,829 | 40,153 | 78,982 |
| KAMISHAK BAY DISTRICT | | | |
| Inisksin Bay | | | |
| North Head Creek | | 106 | |
| Sugarloaf Creek | | 109 | 0.1- |
| Total Run Ursus Cove/Brown's Peak Creek | | 7,869 | 215 7,869 |
| Rocky Cove/Sunday Creek | | 24,029 | 24,029 |
| Kirschner Lake | 1,776° | 27,020 | 1,776 |
| Bruin Bay & River | • | 134,887 | 134,887 |
| Kamishak/Douglas Reef | | 1,954 | 1,954 |
| KAMISHAK BAY DISTRICT TOTAL | 1,776 | 168,954 | 170,730 |
| TOTAL LOWER COOK INLET | 1,457,819 | 918,406 | 2,376,225 |

Escapement estimates are derived from periodic ground or aerial surveys with stream life factors applied.
 China Poot and English Bay catches include 6 and 1 pinks respectively caught during hatchery sockeye salmon cost

^c Kirschner Lake pinks inleude 414 taken during common property fishing and 1,362 taken during hatchery sockeye cost recovery operations.

Table 7. Number of readable scales and corresponding confidence levels, for age composition estimates of Lower Cook Inlet sockeye and chum salmon samples, 1998.

| | | Sample | | Confidence interval (d=0.05) ^a |
|---|--|-----------------------------------|---|---|
| Fishery | Dates | Size | Type | , , |
| | Sockey | e Salmon | | , |
| Bear Lake China Poot Delight Lake Desire Lake Grouse Lake | 3 June-20 June 15 July 7 July- 19 July 17 July 15 July-10 Sept | 1,200 553 491 104 254 | Scale Scale Scale Scale Scale | 1.000 1.000 0.955 0.438 0.911 |
| | Total | 2,602 | - | |

a Simultaneous confidence interval for multiple age classes (Thompson 1987)

Age, sex, and size composition of sockeye salmon commercial catch from China Poot Bay, 1998 Table 8.

Age Composition by Brood Year

| Sample Period: 15 July 0.70 2.00 1.40 46.70 Percent 2.20 0.70 2.00 1.40 46.70 Sample Size 15 220 0.70 2.00 1.40 46.70 Sample Size 15 220 0.70 2.00 1.40 46.70 Sample Size 15 2.00 1.84 11 1.82 2.58 Mean Meight 0.86 1.87 2.09 1.84 1.82 2.58 Sample Size 1 15 1 1 1 1.82 2.58 Sample Size 1 1 1 1 1 1 2.58 Sample Size 1 1 1 1 1 2.33 2.33 Sample Size 483 2 483 3.55 496 51.7 484 State Exert 2 2 4 1 1 2 1 Sample Size 1 2 4 | | 1. | 1.2 | 2.1 | 1.3 | 2.2 | 2.3 | total |
|---|----------------------------|----------|-------------|-----|----------|------------|----------------|------------|
| 2.70 39.90 0.70 2.00 1.40 8 25 489< | Period: 1 | 2 | | | | | | |
| 370 484 525 489 479 370 484 394 525 489 479 3 1 10 8 411 449 6 1.87 2.09 1.84 1.8 1 15 2.09 1.84 1.8 1 15 2.75 483 49.60 1.10 2.40 0.20 53.3 483 5.75 496 517 48 1.72 1.69 1.95 1.77 2.70 89.50 0.70 3.10 3.80 0.20 100.00 15 495 34 529 493 517 48 3 1 2.1 2.1 48 3 495 495 495 495 495 3 495 495 495 495 495 55 15 495 495 495 417 21 1 55 15 495 | Males Percent | 2.70 | 9.9 | 7. | 0. | 4. | | 6.7 |
| 15 220 49 118 8 25 0.86 1.87 2.09 1.84 1.8 0.08 1.87 2.09 1.84 1.8 1 15 2.09 1.84 1.8 49.60 1.10 2.40 0.20 53.3 483 535 496 517 48 2.75 89.50 0.70 3.10 3.80 0.20 100.00 2.70 89.50 0.70 3.10 3.80 0.20 100.00 15 495 495 491 559 493 517 483 3 0.86 1.79 2.09 1.75 1.95 1.77 1 44 1 1 44 1 1 44 1 1 4 4 1 | Sample Size Mean Length | 15 | α | σ | 1 | 0 | | 25 |
| 15 | Std. Error |)) |) |) 1 | 1 | o — | | _ |
| 0.86 1.87 2.09 1.84 1.00 1 1 1 1 49.60 1.10 2.40 0.20 53.3 483 535 496 517 48 1 275 6 13 1 29 1 275 6 13 1 29 1 275 6 13 1 29 1 275 6 13 1 29 1 275 4 17 3.80 0.20 10.00 2 2 4 17 3.80 0.20 100.00 15 495 4 17 22 1 48 3 0< | Sample Size | 15 | 2 | | | | | 2 |
| 1 0.08 | Mean Weight | 8. | .87 | | 0. | 8. | | ω. |
| 2.75 1.10 2.40 0.20 53.3 483 535 6 13 1 29 483 535 496 517 48 2.75 1.72 1 29 1.95 1.77 0.03 0.03 0.70 3.10 3.80 0.20 100.0 15 495 4 17 21 1 48 370 483 394 529 493 517 48 370 4883 394 529 493 517 48 370 4883 394 529 493 517 48 386 1.79 2.09 1.75 1.95 1.77 0.86 1.79 2.09 1.75 1.95 1.77 1 44 1 4 1 4 1 | Std. Error Sample Size | Н | 15 | | Н | П | | 0. |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Females | | | | | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Percent | | 9.6 | | Η. | 4. | ζ. | 3.3 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Sample Size | | 27 | | | Ţ | | 29 |
| 2.75 | Mean Length | | ∞ | | 3 | 9 | \vdash | ∞ |
| 2.75 6 13 1 29 1.72 0.03 0.03 3.10 3.80 0.20 100.0 2.70 89.50 0.70 3.10 3.80 0.20 100.0 1.5 495 493 529 493 517 488 3.0 10 6 5 5 6 1.5 495 4 17 2.1 1.95 1.95 0.04 1.79 2.09 1.75 1.95 1.77 0.86 1.79 2.09 1.75 1.95 1.77 0.04 1 44 1 1 44 1 | Std. Error | | | | \vdash | | | T |
| 2.70 89.50 0.70 3.10 3.80 0.20 100.0 2.70 89.50 0.70 3.10 3.80 0.20 100.0 15 495 4 17 21 1 55 370 483 394 529 493 517 48 3 0 10 6 5 5 1 55 15 495 4 17 21 1 55 0.86 1.79 0.04 1 44 1 4 1 4 1 4 1 5 1.95 1.75 0.00 </td <td>Sample Size</td> <td></td> <td>7</td> <td></td> <td></td> <td></td> <td>\leftarrowI</td> <td>9</td> | Sample Size | | 7 | | | | \leftarrow I | 9 |
| 2.70 89.50 0.70 3.10 3.80 0.20 100.0 15 495 4 17 21 1 55 370 483 394 529 493 517 48 3 0 10 6 5 5 1 48 15 495 4 17 21 1 55 0.86 1.79 2.09 1.75 1.95 1.77 1 44 1 4 1 5 | Mean Weight | | . 7 | | | 9. | 9 | . 7 |
| 2.70 89.50 0.70 3.10 3.80 0.20 100.0 15 495 4 17 21 1 55 370 483 394 529 493 517 488 3 0 10 6 5 5 15 495 4 17 21 1 55 0.86 1.79 2.09 1.75 1.95 0.00 1 444 1 1 444 | Std. Error | | 0 | | | \vdash | | 0. |
| 2.70 89.50 0.70 3.10 3.80 0.20 100.0 15 495 4 17 21 1 55 370 483 394 529 493 517 48 3 0 10 6 5 5 5 48 15 495 4 17 21 1 55 0.86 1.79 2.09 1.75 1.95 1.77 0.04 1 44 1 4 1 | Sample Size | | 7 | | | | Н | 3 |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | Both Sexes | | | | | | | |
| 15 495 4 17 21 1 55 370 483 394 529 493 517 48 3 0 10 6 5 5 15 495 4 17 2 1 55 0.086 1.79 2.09 1.75 1.95 1.75 0.004 1 44 1 5 | Percent | 2.70 | 9.5 | . 7 | <u>.</u> | ω. | 0.2 | 0.00 |
| 370 483 394 529 493 517 48 3 0 10 6 5 5 1 48 15 495 4 17 21 1 55 0.86 1.79 2.09 1.75 1.95 1.77 0.004 1 44 1 5 | Sample Size | 15 | 9 | | \vdash | $^{\circ}$ | | 55 |
| 3 0 10 6 5 15 495 4 17 21 1 55 0.86 1.79 2.09 1.75 1.95 1.7 0.04 0.10 0.00 | Mean Length | 370 | $_{\infty}$ | 9 | \sim | 9 | \vdash | $^{\circ}$ |
| 15 495 4 17 21 1 55 0.86 1.79 2.09 1.75 1.95 1.7 0.00 0.00 | Std. Error | n | | | | | | |
| 0.86 1.79 2.09 1.75 1.95 1.7 0.04 0.10 0.10 0.0 1 44 1 5 | Sample Size | 15 | 9 | 4 | | | П | 2 |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | Mean Weight | 0.86 | . 7 | | 0. | . 7 | 9 | 7. |
| 1 	 44 	 1 	 5 | Std. Error | | 0. | | | Η. | | 0. |
| | Sample Size | \vdash | | | ⊣ | 4 | П | Ω |

Table 9. Age, sex, and size composition of sockeye salmon escapement from Delight Lake, 1998.

| | Age Composition by Brood Year | | | | | | | | |
|----------------|-------------------------------|-------|------|------|------|--------|--|--|--|
| | 1.2 | 1.3 | 2.2 | 2.3 | 3.3 | total | | | |
| Sample Period: | 7 July to 19 | July | | | | | | | |
| Males | | | | | | | | | |
| Percent | 9.60 | 29.80 | 2.20 | 1.00 | | 42.60 | | | |
| Sample Size | 47 | 146 | 11 | 5 | | 209 | | | |
| Mean Length | 494 | 566 | 513 | 569 | | 547 | | | |
| Std. Error | 3 | 2 | 8 | 8 | | 1 | | | |
| Sample Size | 47 | 146 | 11 | 5 | | 209 | | | |
| Females | | | | | | | | | |
| Percent | 24.00 | 25.60 | 4.50 | 3.10 | 0.20 | 57.40 | | | |
| Sample Size | 118 | 126 | 22 | 15 | 1 | 282 | | | |
| Mean Length | 485 | 536 | 495 | 535 | 545 | 511 | | | |
| Std. Error | 2 | 1 | 5 | 7 | | 1 | | | |
| Sample Size | 118 | 126 | 22 | 15 | 1 | 282 | | | |
| Both Sexes | | | | | | | | | |
| Percent | 33.60 | 55.40 | 6.70 | 4.10 | 0.20 | 100.00 | | | |
| Sample Size | 165 | 272 | 33 | 20 | 1 | 491 | | | |
| Mean Length | 488 | 552 | 501 | 543 | 545 | 526 | | | |
| Std. Error | 1 | 1 | 4 | 5 | | 1 | | | |
| Sample Size | 165 | 272 | 33 | 20 | 1 | 491 | | | |

Table 10. Age, sex, and size composition of sockeye salmon commercial catch from Desire Lake, 1998.

| | Age | Age Composition by Brood Year | | | | | |
|----------------|---------|-------------------------------|------|--------|--|--|--|
| | 1.2 | 1.3 | 2.2 | total | | | |
| Sample Period: | 17 July | | | | | | |
| Males | 8 | 30 | 2 | 40 | | | |
| Percent | 6.67 | 25.00 | 1.67 | 33.33 | | | |
| Sample Size | 7 | 26 | 2 | 35 | | | |
| Mean Length | 517 | 570 | 525 | 557 | | | |
| Std. Error | 4 | 4 | 14 | 3 | | | |
| Sample Size | 7 | 26 | 2 | 35 | | | |
| Females | 31 | 48 | 1 | 80 | | | |
| Percent | 25.83 | 40.00 | 0.83 | 66.67 | | | |
| Sample Size | 27 | 41 | 1 | 69 | | | |
| Mean Length | 491 | 541 | 540 | 522 | | | |
| Std. Error | 4 | 3 | | 2 | | | |
| Sample Size | 27 | 41 | 1 | 69 | | | |
| Both Sexes | 39 | 78 | 3 | 120 | | | |
| Percent | 32.50 | 65.00 | 2.50 | 100.00 | | | |
| Sample Size | 34 | 67 | 3 | 104 | | | |
| Mean Length | 496 | 552 | 530 | 533 | | | |
| Std. Error | 3 | 2 | 14 | 2 | | | |
| Sample Size | 34 | 67 | 3 | 104 | | | |

Age, sex, and size composition of sockeye salmon escapement from Bear Creek, 1998. Table 11.

| Sample Period : 20 June Males Males | | | | Age Composition | tion by Brood | Year | | |
|--|-------------|----------|----|-----------------|---------------|----------|-----|----------|
| The Feriod : 20 June The June | | 1.1 | | | | | | lπ |
| First bound of the color of the | Period | 1 | | | | | | |
| nt 0.10 0.10 32.10 6.80 0.60 0.10 39.8 e Size 1 387 81 7 1 47 Error 355 495 32.10 6.80 0.60 0.10 39.8 Error 1 1 387 81 7 1 47 Weight 0.80 2.00 1.84 2.48 2.20 2.20 1.9 Error 1 1 386 81 7 1 47 Error 0.10 0.10 0.01 0.01 0.01 0.00 0.00 e Size 1 1 2 4 1.7 4 4 Error 0.00 0.01 0.01 0.01 0.02 0.05 0.05 0.06 e Size 1 0.02 0.01 0.03 0.05 0.06 0.06 e Size 1 0.03 0.03 0.05 0.06 0. | Males | | | | | | | |
| e Size 1 1 387 81 7 1 49 Errort 1 1 387 81 7 1 49 Error 1 1 387 81 7 1 47 e Size 1 1 386 2.48 2.20 2.20 1.9 Error 0.00 1.84 2.48 2.20 2.20 1.9 Error 1 386 3.20 0.09 0.09 0.00 e Size 1 47 51.90 0.60 0.50 0.00 e Size 1 66 92 7 6 7 4 e Size 1 61 92 7 6 7 7 e Size 1 1 92 7 6 7 6 e Size 1 1 1 1 1 6 1 7 1 7 e Size | Percent | 0.10 | - | 2.1 | ω. | 9. | 0.1 | 9.8 |
| Length 355 495 483 531 495 520 495 Error 1 387 483 531 495 520 497 Error 1 387 483 520 2.20 1.9 Error 0.08 2.00 1.84 2.48 2.20 2.20 1.9 Error 1 1 386 7.70 0.60 0.50 60.20 e Size 0.10 1.84 2.48 2.0 1.44 47 e Size 1 1.73 7.70 0.60 0.50 60.20 e Size 1 47 519 481 501 481 Error 1 65 2.14 1.73 2.02 1.72 Sexes 1 616 0.03 0.05 0.06 0.06 0.06 Sexes 2 1 2 4 4 4 4 Sexes 2 2 <td></td> <td>Π</td> <td>H</td> <td>∞</td> <td>8</td> <td></td> <td></td> <td>47</td> | | Π | H | ∞ | 8 | | | 47 |
| Error Error 1 387 81 7 1 47 Weight 0.80 2.00 1.84 2.48 2.20 2.20 1.99 Error 1 386 2.48 2.20 2.20 1.99 e Size 1 386 7.70 0.60 0.50 60.20 e Size 1 477 519 481 501 48 Length 330 477 519 481 501 48 Error 1 616 92 7 6 72 Weight 0.60 1.65 2.14 1.73 2.02 1.73 Sexes 1 616 92 7 6 7 1.20 Length 342 495 479 525 488 504 48 Error 2 1 1,003 1.73 1.72 0.60 100.0 e Size 2 4 525 | Mean Length | 355 | 9 | ∞ | \sim | 9 | 2 | 9 |
| e Size 1 1 387 81 7 1 47 Weight 0.80 2.00 1.84 2.48 2.20 2.20 1.9 Error 1 0.01 0.01 0.01 0.01 0.00 e Size 1 1 386 81 7.70 0.60 0.50 60.2 e Size 1 477 519 481 501 481 Error 1 22 4 13 42 42 Error 1 2 4 13 4 13 Sexes 1 0.01 83.40 14.50 1.20 0.05 0.16 0.0 Error 2 1 1,003 173 14.50 1.20 0.06 100.0 e Size 2 1 1,003 1.73 2.05 1.20 e Size 2 1 1,003 1.73 1.20 0.10 0.00 | Std. Error | | | | | | | J |
| Weight Error 0.80 2.00 1.84 2.48 2.20 2.20 0.00 Error 1 386 81 7 1 47 essize 1 1 386 7.70 0.60 0.50 60.2 essize 1 477 51.30 7.70 0.60 0.50 60.2 e Size 1 477 51.30 7.70 0.60 0.50 60.2 Error 1 616 92 7 6 7 7 e Size 1 616 92 7 6 0.0 0.0 e Size 1 1.65 2.14 1.73 2.02 1.72 e Size 1 0.01 0.03 0.05 0.16 0.16 e Size 2 1 1,20 0.16 0.16 0.10 e Size 2 1 1,20 0.16 0.10 0.10 e Size 2 | Sample Size | Τ | П | ∞ | | 7 | 1 | 7 |
| Error Error 0.01 0.04 0.19 0.00 e size 1 386 81 7 1 47 es size 0.10 51.30 7.70 0.60 0.50 60.2 e Size 1 616 92 481 501 48 Error 1 616 92 7 6 72 Error 1 62 2.14 1.73 2.02 1.7 Error 1 6.5 2.14 1.73 2.02 1.7 Error 1 6.0 0.03 0.05 0.16 0.06 Error 2 1 1,003 173 1,20 0.16 0.06 Error 2 1 1,003 1.73 1,20 0.60 100.0 Error 2 1 1,003 1.73 1,20 0.16 0.10 Error 2 1 1,002 0.10 0.10 <th< td=""><td>Mean Weight</td><td>0.80</td><td>•</td><td>∞</td><td>4.</td><td>.2</td><td>.2</td><td>6.</td></th<> | Mean Weight | 0.80 | • | ∞ | 4. | .2 | .2 | 6. |
| e Size 1 1 1 386 81 7 1 47 es size 1 | Std. Error | | | 0. | 0. | ٦, | | 0. |
| estable between the color of th | Sample Size | \vdash | 1 | ∞ | 81 | 7 | 1 | 7 |
| e Size o.10 51.30 7.70 0.60 0.50 60.2 e Size 1 616 92 7 6 72 4 72 481 501 48 72 4 48 72 48 72 48 72 48 72 48 72 48 72 72 48 72 72 48 72 72 48 72 <td>Females</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | Females | | | | | | | |
| e Size 1 616 92 7 6 72 Length 330 477 519 481 501 48 Error 1 616 92 7 6 72 Weight 0.60 1.65 2.14 1.73 2.02 1.7 Error 1 0.01 0.03 0.05 0.16 0.0 Sexes nt 616 92 7 6 72 Sexes nt 1,003 14.50 1.20 0.06 100.0 e Size 2 1 1,003 173 14 7 1,20 Error 2 1 1,003 173 148 504 48 Weight 0.70 2.00 1.70 0.01 0.02 0.10 0.10 e Size 2 2 34 2 2 1,20 e Size 1 1,002 0.01 0.01 0.10 | Percent | 0.10 | | \vdash | . 7 | 9. | .5 | 0.2 |
| Length 330 477 519 481 501 48 Error 1 2 4 13 48 48 501 48 Error Weight 0.60 1.65 2.14 1.73 2.02 1.7 Weight 0.60 1.05 0.03 0.05 0.16 0.0 Error 0.20 0.10 83.40 14.50 1.20 0.60 100.0 e Size 2 1 1,003 173 14 7 1,20 Length 342 495 479 525 488 504 48 Error 2 1 1,003 1.73 1,20 0.60 100.0 Weight 0.70 2.00 1.70 2.05 1.8 0.0 1,20 e Size 2 1 1,002 0.01 0.01 0.0 0.0 0.0 e Size 2 1 1,002 0.10 0.0 </td <td>Sample Size</td> <td>Π</td> <td></td> <td>616</td> <td></td> <td>7</td> <td>9</td> <td>\sim</td> | Sample Size | Π | | 616 | | 7 | 9 | \sim |
| Error 1 2 4 13 72 4 13 72 4 13 72 72 4 13 72 <td>Mean Length</td> <td>330</td> <td></td> <td>477</td> <td>\vdash</td> <td>8</td> <td>0</td> <td>∞</td> | Mean Length | 330 | | 477 | \vdash | 8 | 0 | ∞ |
| e Size 1 616 92 7 6 72 Weight 0.60 1.65 2.14 1.73 2.02 1.7 Error 0.01 0.03 0.05 0.16 0.0 Sexes 0.20 0.10 83.40 14.50 1.20 0.60 100.0 nt 0.20 1 1,003 173 14 7 1,20 Error 2 1 1,003 173 14 7 1,20 Weight 0.70 2.00 1.72 2.30 1.97 2.05 1.8 Error 2 1 1,002 0.10 0.16 0.0 e Size 2 1 1,002 0.10 0.10 0.16 0.0 e Size 2 1 1,002 0.10 0.10 0.16 0.0 e Size 2 1 1,002 0.10 0.10 0.10 0.10 e Size 2 | Std. Error | | | - | | 4 | 13 | 0 |
| Weight 0.60 1.65 2.14 1.73 2.02 1 Error 0.01 0.03 0.05 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.10 0. | Sample Size | П | | 616 | | 7 | 9 | 7 |
| Error 0.01 0.03 0.05 0.16 0 Sexes 0.20 0.10 83.40 14.50 1.20 0.60 100 nt 2 1 1,003 173 14 7 1, Length 342 495 479 525 488 504 1, Error 2 1 1,003 173 14 7 1, Weight 0.70 2.00 1.72 2.30 1.97 2.05 1 Error 2 1 1,002 1.73 1.44 7 1, e Size 2 1 1,002 1.73 1.44 7 1, In 1,002 1.73 1.44 1, 1, 1, | Mean Weight | 09.0 | | 9. | .1 | . 7 | 0 | 7. |
| e Size 1 616 92 7 6 Sexes Sexes nt 0.20 0.10 83.40 14.50 1.20 0.60 100 nt 2 1 1,003 173 14 7 1, Length 342 495 479 525 488 504 Error 2 1 1,003 173 14 7 1, Weight 0.70 2.00 1.72 2.30 1.97 2.05 1 Error 0.01 0.01 0.16 0.16 0 e Size 2 1 1,002 0.16 0 1 | Std. Error | | | 0. | 0. | 0. | ⊢. | 0. |
| Sexes ont Sexes of the state of | | Н | | 616 | | 7 | | 2 |
| e Size | Both Sexes | | | | | | | |
| Length 342 495 479 525 488 504 7 1, length 342 495 479 525 488 504 13 | Percent | 0.20 | Η. | 3.4 | 4.5 | .2 | • | 100.00 |
| Length 342 495 479 525 488 504 Error 0 1 6 13 e Size 2 1 1,003 173 14 7 1, Weight 0.70 2.00 1.72 2.30 1.97 2.05 1 Error 0 0.01 0.02 0.10 0.16 0 e Size 2 1 1,002 173 14 7 1, | Sample Size | 2 | | 00, | ^ | \vdash | 7 | 1,200 |
| Error 0 1 6 13 e Size 2 1 1,003 173 14 7 1, Weight 0.70 2.00 1.72 2.30 1.97 2.05 1 Error 0.01 0.02 0.10 0.16 0 e Size 2 1 1,002 173 14 7 1, | Mean Length | 342 | 9 | _ | $^{\circ}$ | ∞ | 0 | 486 |
| e Size 2 1 1,003 173 14 7 1, | Std. Error | | | | | 9 | 13 | 0 |
| Weight 0.70 2.00 1.72 2.30 1.97 2.05 1.8 Error 0.01 0.02 0.10 0.16 0.0 e Size 2 1 1,002 173 14 7 1,19 | Sample Size | 2 | 1 | 00, | 7 | | 7 | • |
| Error 0.01 0.02 0.10 0.16 0.0 e Size 2 1 1 1,002 173 14 7 1,19 | Mean Weight | 0.70 | • | 1.72 | 33 | 9. | 0. | 8 |
| Size 2 1 1,002 173 14 7 1,19 | ഥ | | | 0.01 | 0. | 1 | . 1 | 0. |
| | Sample Size | 2 | П | 1,002 | 7 | | 7 | 19 |

Table 12. Age, sex, and size composition of sockeye salmon escapement from Grouse Lake, 1998.

| | | | Age Composi | tion by Brood | Year | | |
|-----------------|--------------|-----------|-------------|---------------|------|------|--------|
| | 1.1 | 1.2 | 2.1 | 1.3 | 2.2 | 2.3 | total |
| Sample Period : | 15 July - 10 | September | | | | | |
| Males | | | | | | | |
| Percent | 14.40 | 2.40 | 0.40 | 7.20 | 0.40 | | 24.80 |
| Sample Size | 36 | 6 | 1 | 18 | 1 | | 62 |
| Mean Length | 341 | 471 | 320 | 508 | 470 | | 404 |
| Std. Error | 3 | 8 | | 11 | | | 3 |
| Sample Size | 36 | 6 | 1 | 18 | 1 | | 62 |
| Mean Weight | 0.69 | 1.62 | 0.60 | 2.56 | 1.80 | | 1.34 |
| Std. Error | 0.02 | 0.08 | | 0.22 | | | 0.06 |
| Sample Size | 36 | 6 | 1 | 18 | 1 | | 62 |
| Females | | | | | | | |
| Percent | 0.40 | 4.00 | | 70.00 | | 0.80 | 75.20 |
| Sample Size | 1 | 10 | | 175 | | 2 | 188 |
| Mean Length | 335 | 470 | | 519 | | 525 | 515 |
| Std. Error | | 7 | | 1 | | 4 | 1 |
| Sample Size | 1 | 10 | | 175 | | 2 | 188 |
| Mean Weight | 0.60 | 1.61 | | 2.24 | | 2.50 | 2.20 |
| Std. Error | | 0.08 | | 0.02 | | 0.20 | 0.02 |
| Sample Size | 1 | 10 | | 175 | | 2 | 188 |
| Both Sexes | | | | | | | |
| Percent | 14.80 | 6.40 | 0.40 | 77.20 | 0.40 | 0.80 | 100.00 |
| Sample Size | 37 | 16 | 1 | 193 | 1 | 2 | 250 |
| Mean Length | 341 | 470 | 320 | 518 | 470 | 525 | 488 |
| Std. Error | 3 | 5 | | 1 | | 4 | 1 |
| Sample Size | 37 | 16 | . 1 | 193 | 1 | 2 | 250 |
| Mean Weight | 0.69 | 1.61 | 0.60 | 2.27 | 1.80 | 2.50 | 1.99 |
| Std. Error | 0.02 | 0.06 | | 0.03 | | 0.20 | 0.02 |
| Sample Size | 37 | 16 | 1 | 193 | 1 | 2 | 250 |

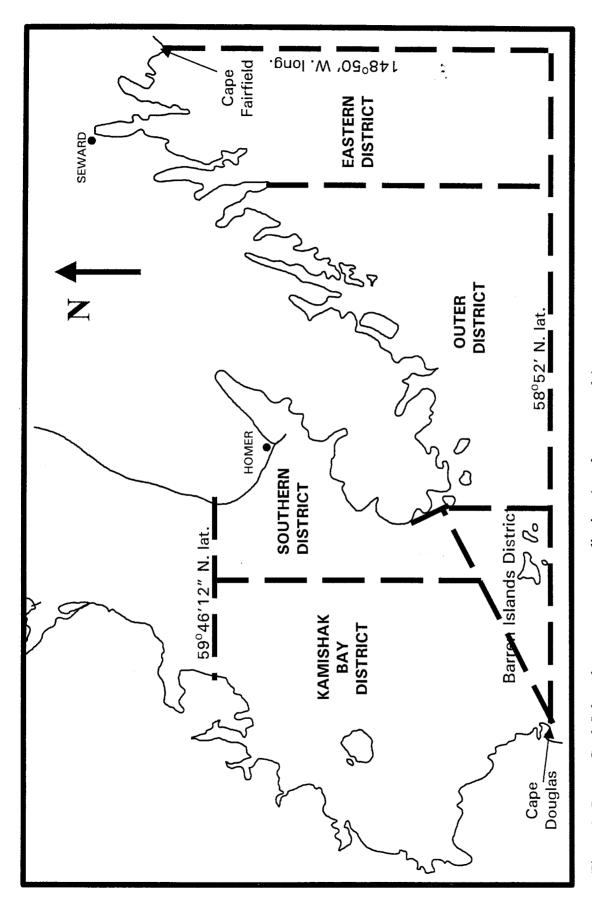


Figure 1. Lower Cook Inlet salmon management districts (not drawn to scale)

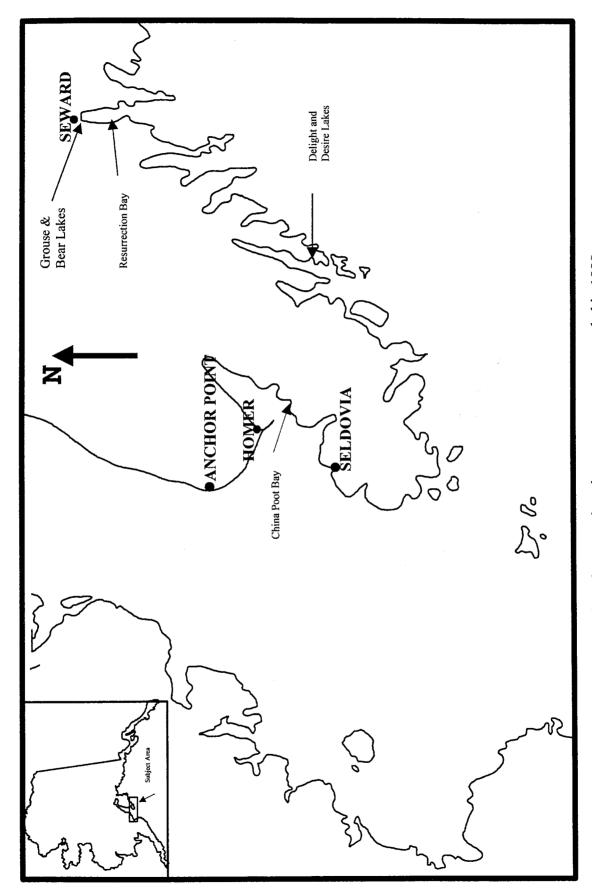


Figure 2. Location of 5 Lower Cook Inlet salmon catch and escapement areas sampled in 1998.

APPENDICES

Appendix A. China Poot: age, and mean length and weight (± Standard Error; SE) of the commercial sockeye salmon catch by brood year and age group. Dashed line indicates no data were collected during that brood/harvest year; italics indicate escapement data. Calculated means reflect corrections made to previously reported data.

| Brood | | | | | | | | | | | | | | Ago | e Gro | up | | | | | | | | | | | | | |
|----------------------|-----------------|--|--|------------------------|-----------------------------|---|--|---|--|----------------------|---|---|------------------------|-----------------|---------------|------------------------|--|-----------------------------|--|--|---------------------|--|---|--|---|-------------------|---|--------------------------|--|
| Year | 1.1 | SE | n | 1.2 | SE | n | 1.3 | SE | n | 1.4 | SE | n | 2.1 | | | | SE | | 2.3 | SE | n | 2.4 | SE | n | 3.1 | SE | n | 3.2 | SE n |
| | | | | | | | | | | | | I | Male m | ean leng | gth (m | ım) by | brood y | /ear | | | | | | | | | | | |
| 1075 | | Secure. | 2010/010 | this Goldain | | | 512 | NA | 1 | | | and the | | | | | Salata Salata | | | | (Personal pro- | | | | | 124 | | | |
| 1976 | estet E | | | 515 | 4.11 | 37 | 540 | P-91-26-179-240-091- | 1 | | | (NXXXXXXXX | andmen. | | 5052030 | 840 <u>.</u> 16. | CPL Paris | | | (SZZZČENÍ | 1 2-W/10/AD | | | | | MALCON ST | 200.00 | | |
| 1977 | | to the same of the | | 489 | 12.22 | 25 | | | | 2.10 | (A.W) | | 436 | 11.00 | 2 | | l de | AUCE. | 580 | 35.00 | . 2 | | | | | | | | |
| 1978 | . 1 1 1 1 1 2 4 | ************************************** | L1:040000100000 | a. And And Defendables | doest governers | | | NA | 1 | paramanan meneralah | erre personaliteite | a nere atomy motore | | | w 1000 to 500 | | 20.00 | 2 | 565 | NA | 1 | PAGE TO CAMPACITY | | | *************************************** | | - SECULO | : 152 to led en en en en | TO THE REAL PROPERTY OF THE PARTY OF THE PAR |
| 1979 | 400 | 20.61 | a togili | STATE OF STREET | PROGRAMMA SANCES | 420000000000000000000000000000000000000 | e v or o more x meno v | 13.63 | 000.0966.2090.000090 | 568 | NA | 1 | | | | 513 | 3.38 | 4.5 | eem is is | | | Pipu | | () () () () () () () () | | i rb | | MLO. | |
| 1980 1 981 | | 29.61 | 20 OUTSTANDS | 494 481 | Lithers included the couple | 258 | | 3.15 15.26 | | | | W.C.K.A | | | | 497 | 3.38 | 43 | | 1.0 | | | | 204 | | G167 | | | |
| 1982 | Market - | 8-4-19-24-19-11-11-11-11-11-11-11-11-11-11-11-11- | SEARCH CONTRACTOR | | 10.48 | | | 10,20 | (a) (a) V (a) (a) | *** | | ALLES CONTR | ESHROWS | | | | ri lattir Forescond | | 546 | 4.00 | 21 | BC29279455.344 | north de la contraction de la | 3 87 000000000000000000000000000000000000 | | | | era w | |
| 1983 | i. Xojuk | | | | 4. | | | 7.00 | | 10.00 | | 7 | | | | | 1.00 | | | | - 8 | | | a estados | 3.1 | | | | a de la companya de l |
| 1984 | ددد | | | | 2.00 | | | 5.00 | 35 | | | | | 12.00 | | | | 70 | 530 | NA | 1 | Elithida equal | 75.098.2383 | TEER COOK | | 1100001100955 | a. i Pagai | 437 | 22.00 2 |
| 1985 1986 | | 4.00 7.00 | | 489 474 | | -439 110 | | 3.00 12.00 | | | | 1,7,17 | | NA 5.00 | 3 | 485 | 2.00 | 43 | | 15.00 9.00 | 4 3 | | a market | | 33432 | 100 | | and a second as | |
| | | ×4.00 | | | | | | | | | 2000 | Sell Zak | | 7.00 | | | 2.00 | | J-11 | 9.00 500 | | Minks | | | | Darie | | | |
| 1988 | | | | 484 | 2.00 | 125 | 541 | | Maria Salah Salah Maria Ma | 9493040 | 27.000000000000000000000000000000000000 | ranger er et et et | | 11.00 | | 518 | 199400-017- 8 520-4860 | Marie - Louis - Co | 503 | NA | 1 | navorani esta esta esta esta esta esta esta esta | in and the contract | Marie I recommission | esteratuses: | 21400000000 | THE STREET | COMMING | Charles Mary Control of the Control |
| | 383 | 3.00 | 12 | | | | | | THE RESERVE TO SECURE TO S | | | | 394 | | | | 6.00 | | | | allowa a s | | | | Michael Michael | | | ii siri | |
| 1990 | * 30E (GSPA) | F23003460 | A0498195.N | | 1.00 | | | 4.00 | AUSTRALIA SELECT MARKET | 2477774 | | | 402 | 4.00 | | CONTRACTOR STATES | 9.00 | Name of the original to the | | A STOCKE | L zegovenie | OTATE AND S | HP-17-(1994) | VALUE OF | Children Commis | res d'ins | 65-36K | | SALES EXPENSIONAL |
| 1991 | | 3.00 | | 4/6 | 1.00 | 148 | | 3.00 | | | XI + 13 | | 403 | 4.00 | ر, د | | 6.00 | | | A A KAC | | Allestone. | min Labor | | 5 3 June 1 | | | Section is also | |
| 1993 | | 6,00 | | 403 | ∴1: 00 | 210 | | | | | | | \$2500 | | | | 11.00 | | | | | | 077 - 25 3 08 | | | | No artic | 22.23 | A Section of the last |
| 1994 | 407 | 19.00 | 2 <i>3</i> 8 | 484 | 1.00 | 220 | JLJ | 0.00 | W. 1 4 | 61300 (B14)3 | | AC CO PIGETORIA | 394 | 10,00 | 4 | 10000W 488 11111 | | ************* | Maria Ma | | | | in the second | ipur u | | | | | |
| 1995 | 370 | 3.00 | ± 15± | 1 Ling | Service . | | | | | | | erspective (| | | | | A Indian | 24 (gas 25) 14 (44) | | | egg et na | escue: | | | | e Committee | | | |
| | | | | | | | | | | | Fen | nale m | ean len | gth (mn | n) by l | brood | year | | | | | | | | | | | | |
| 1975 | ur nak | 254884019 254884019 | valedonia | 148622404486 | 86P35189 KW | 0000000 | 500 | 24.51 | 2 | | 77.777.745.7 | 1012000 | | | | 500 | 14.00 | | 15.23.6863 | appeters | | Section Co. | 7770361 | | | 2.6 | 18.700 | | |
| 1976 1977 | | e partiries. | | 511 | 4.16 | RECORDER OF THE | ုသည | 24.51 | | | On the gra | | 725 <u>, 316</u> 5, 52 | | k | JUG | 14.00 | 4 | | | | Ossanda. | 63 a 33 | 2011 7810 | Canada Cala Cala | MW LYSSLAND | at of Asset | | a and an artist and the control of t |
| 1978 | | | | | 6.72 | | | | | | | i na | 512 | 22.00 | 2 | | | | 569 | NA | 1 | | | 2.0 | | | | | |
| 1979 | ALC - 1270.7 | and a marriage of the second | edin di villa acced | | | M - We d - 1 P 2 11 11 11 | 573 | 28.50 | | 511 | NA | 1 | | | | | 10.00 | | | 00000000000000000000000000000000000000 | o y Lander December | NOTES NOTES AND | Siliate muneración | Konstand N.C. (2000) | 201000-016-12-1745-64 | GAM and side (SO) | nciss someone | KUPSETTEPSTAPS | MANAGE LIPAT STREET STREET STATE |
| 1980 | 95 22 S | K.A.C. | | | | 296 | 549 | 9.41 | | | Z Pach | to yet to | | | | 501 493 | 6.00 3.46 | 19 35 | 547 | 13,32 | 3 | A STATE | in a | | | Willia. | iti: Selas | 5000 | |
| 1981 1982 | S12.256 | | | 494 | | | 539 | 4.53 | 21 | | | | ua E | 100 | (CHO) | 493 | | | | | | | | | | | | | |
| 1982 | | | | | 32.46 | | | | | 632 | NA | 1 | t for a second | y 10391 0 176 L | 2127906.793 | | | The same | | 15.00 | 8 | | | | | | A. 1668 | | |
| 1984 | | | | | 200 | | 551 | 4.00 | 23 | | | | | | | | 1.00 | | | | ⊪6 € | | | | | | | | |
| 1985 | metal since | - | ******* | 494 | 1.00 | | | 5.00 | | | er company tur | V21-1804-1100-00 | 441 | 56.00 | 2 | | | 41 | 574 | NA | 1 | *** | | | Tata montones | JUNEAU CONTRACTOR | | 486 | NA 1 |
| 1986 | 340 | NA. | 1. | | | | | 6,00 7.00 | 19 | | | e Carrie | | | | 478 | 2.00 | | 538 | 23.00 NA | 4 1 | and the same | | | | | | | |
| 1987 1 988 | statilit: | Jor Making de | (8 y/2/d) | 412 477 | 2.00 2.00 | 103 | 524 | 9.00 | 2.5 8 | | | | | | | 491 | | | | 1477 | a Negati | | | | | | | | |
| 1989 | 232-0842 | | | 485 | | | | es A Maria | ************************************** | | | pportugeration is a | | | | 521 | | | 513 | NA | 1 | own and the first of the first | | | | | | nuestan neutriklis | er a gray a Sept on Action of Sept of Sept |
| 1990 | 119 | encolors. | 200 | 495 | 1200 | | 521 | 2.00 | | 492 | NA. | 1 | | | | | 4.00 | ********** | | | | | | | | O Jea | . 102.330 | | |
| 1991 | (2)(2)(1)(2)(m) | 2-670/608/66/22 | e normalis de la companya della companya della companya de la companya della comp | 464 | | | 528 | | 46 | -25-1 <u>a</u> -10-6 | | 131000000000000000000000000000000000000 | | | 2 | | 8.00 | 4 | C14 | 374 | 1911 | | | | CONT. WEST | 1414.00 | | | |
| 1992 | | | | Small march had been | 1.00 | Modern Markey | ay a way begin a single grant of the first | 2.00 | MARKON CONTRACTOR CONTRACTOR | | | buk. | 387 514 | NA NA | 1 | | 7.00 | 4 13 | 31/ | NA | 1 | .v. la s | | | Control Control | th LL | | \$ Section 1 | |
| 1993 | . 20 | 6 NA | 35.31 | | | | | | U | | Transfelli | 1302 | 314 | INA | 1 -(2,55 | 470 | 0.00 | 13 | ila, et Sa | 2 30000 | na sy k | | 2.3 | 4 (313) | Cit | N-40 | 25 | 1000 | |
| 1994 | July 2.0 | U. INM | and the | 103 | 4.1.00 | | a) substitute le se a | ALCONOMICS OF THE PARTY OF THE | | | zana da ka | A LONG MANAGEMENT | | | | Karla Marija Alba Alba | or the control of the | | | reconstructed to collect (\$1 | auto rational | e militario de la compansión de la compa | au Artantika 1964 | erantus un segui de la | e ese training | enchistation (ef | | EMICO CONTRACTOR | |
| 1775 | | | | | | | | | | | | | | ontinued | 1 | | | | | | | | | | | | | | |

| | | | | | | Age | Group | | | | | | |
|---------------|--|--|---|--|--|--|-----------------------|--|--------------|--------------------------|--|---|--------------------------------|
| Brood Year | 0.3 | 0.4 | 1.1 | 1.2 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2.4 | 3.1 | 3.2 | 3.3 |
| | | | | | Male harve | st (number | of fish) by | brood year | | | | | |
| 1975 | | | | * | 152 | | | | | | | | |
| 1976 | | | | 5,620 | 136 | | 272 | | 266 | 9-20-2 | | | |
| 1977 1978 | | | | 3,394 | 133 | E GREAT STATE OF THE STATE OF T | | 266 | 216 | and records to | | | and the same |
| 1979 | | | | 32,845 | 1,941 | 190 | | 1,509 | 210 | | | | |
| 980 | 2.4.442.242222 | Nac 2522 at 15 254.15 | 655 | 55,632 | 6,444 | ANGLES AND A | | 8,528 | in a strain. | | an parabolic con | | |
| 1981 | | 15.578 | | 15,161 | 4,781 | | | | | | | | |
| 982 | | **** | ###################################### | 6,694 | | | | | 1,406 | | | | |
| 983 | | | | | 1,326 | | | 17,249 | 307 | | #PARCE DESCRIPTION | | |
| 984 | | | | 12,862 | 1,324 | 41 0/M/1997201212-155-1 | 1,174 | 2,592 | 68 | Commission of the law in | Name to be because of a state of | 384 | The second second second |
| 985 986 | | Li AMILI | 1,126 | 16,595 | 1,823 | | 35 | 2,904 | 322 | | | | |
| 987 | 200 m. 4 | | 153 540 | 7,429 25,628 | 2,141 1,157 | | 203 452 | 16,172 15,044 | 386 | | | | |
| 988 | | | , | 16,073 | 2,295 | | 643 | 2,868 | 88 | cont. | | | |
| 989 | | | 1,543 | 19,789 | 2,821 | | 287 | 970 | 500 I | | | | |
| 990 | YA. | 41.5 A | 287 | 13,225 | 3,147 | | and the second second | 662 | | | Salahan Triff | 10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (| a ba a hidden hid |
| 991 | | | | 21,200 | | | 497 | | | | | | |
| 992 | * | *************************************** | 3,478 | | *************************************** | | | C 7002 70 20 10 10 10 10 10 10 10 10 10 10 10 10 10 | | | 27.0.344.0.0.0.2.0.004.004.004.004.004 | | |
| 993 | | | 5,452 | 17,665 | 1,609 | | | 1,126 | | | | | |
| 1994 | was annual of the same of the | obstants conferenting this satisfies | 651 | 32,099 | | | 563 | | | | | | AND CONTRACTOR AND ASSESSMENT |
| 1995 | * | SUBTRIES. | 2,172 | | | | | Maria da | h i | I_{i} | | | EQUANTI |
| | | | | Fe | male harve | st (number | of fish) by | brood year | | | | | |
| 975 | | | | | 456 | | | 304 | | | | | |
| 976 | | | | 5,468 6,926 | | | 272 | 100000000 | 100 | | | | |
| 977 978 | | | | 0,920 | 266 | 216 | 212 | 266 | 133 | August Alban | | | ûpe (j. 1874) |
| 979 | | | | 39,360 | 647 | 210 | | 4,097 | 569 | | CONTRACT. | 186 | |
| 980 | 1-14-1-1-1-1 | (42) (1804) (4) | | 40,106 | 5,117 | to and the second second | | 6,633 | | | | | Marillo on de |
| 981 | | | | 14,783 | e called a | | | 956 | | | | | |
| 982 | | | | 2,869 | | 56 | | | 514 | | | | |
| 983 | | | | | 1,567 | | ***** | 14,203 | 229 | | | | |
| 984 | No. of the Contract of the Con | error men i de grada forma da - | | 11,876 | 915 | | 113 | 1,567 | 68 | | | 192 | +10 |
| 985 | T. | A CONTRACT | 56 | CANALISA ORGANISA BERUTUK MERENTIKA | 1,283 | | | 4,457 | 619 | | | 400 | |
| 986 | | | | 11,008 | 3,015 | * | 100 | 17,386 | 129 | 1557.4.4.4 | | 2.00 | |
| 987 | 5100 | Daulie is Santill | | 22,622 13,244 | 1,029 2,008 | | | 14,400 2,008 | 88 | | | | |
| 988 989 | | | | 38,146 | 3,527 | 166 | 100 | 1 327 | 00 | 3,566 | | 1999 | |
| 990 | | | | 6,966 | 7,619 | 200 | 176 | 662 | | | Wall Rottley Co. | A | |
| 1991 | | | | 54,656 | | | 166 | | | 100 | | | |
| 1992 | | AND DESCRIPTION | 2 | | A Series | 1 | enduktistikabilete | | 161 | | | | CALL AND DESCRIPTIONS |
| | | | | 15,364 | 885 | | | 1,931 | | 174 | 344 | | |
| 993 | The same of the same of the same | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | 249004708470 | Part of the second seco | | | 500 Table 1900 | discount of the second | | | | THE RESERVE AND A STATE OF THE PARTY OF THE | No. of the party of the second |
| 993 994 | | | 87 | 39,902 | ogerakon engeren Stopher poolert Noob | | eriojis izane a tra | Control of the State of the Sta | | | | | |

| Append | dix A | cont'd (| China P | oot: pa | ige 4 of | `4) | | | Δne | Group | | | | | | | | | | | | |
|----------------------|------------------------|------------------------|----------------------------|--|------------------------------|-------------------------|-------------------|---|--|--|----------------|---|--------------|---------------------|-------|-------|---|------------|--------|---|-------------------|------|
| Year | 1. | l n | 1.2 | n | 1.3 | n | 1.4 | n | 2.1 | N | 2.2 | n | 2.3 | n | 2.4 | n | 3.1 | n | 3.2 | n | 3.3 | n |
| Tour | | | 1.2 | | 2.0 | | | | - | | | | | | 2.1 | | 3.1 | | J.2 | -" | 5.5 | 11 |
| | | | | | | | | Mai | e age c | ompos | ition by | harve | est year | | | | | | | | | |
| 1980 1981 | | | 46.83 30.85 | ARREST TOWN | 1.27 1.24 | 1 1 | | | 2.47 | 2 | | a A | | | | | | | | | | |
| 1982 | | -1 | | | | | g (<u>184</u> 7. | Najš | 2.47 | 2 | | | J | J. D. K | | 3157A | | | | | | |
| 1983 1984 | 0.9 | EU00-Z01/0/40/02MH/500 | 44.27 53.31 | 247 258 | 0.18 | 1 9 | | | | | 0.36 | 2 7 | 0.36 0.21 | 2 | | | | - 1 | | | | |
| 1985 | 20, 1044 (1128) (112 | | 26.40 | 80 | 11.22 | 34 | 0.33 | Ì | | | 14.85 | | | | | | Maria Sangar | | | | an see start and | |
| 1986 1987 | | | 43.75 | 1 | 31.25 | 5 | | (Aug.) | | | | | | | | | | | | | | |
| 1988 1989 | -1.7 0.4 | 7 20 | 20.25 46.36 | 100 to 10 | 2.09 3.70 | 19 35 | N. Zuri | | 1.85 0.10 | 20 1 | 27.15 7.24 | 256 70 | 2.21 0.86 | which were the same | - 7 | | | | | | | |
| 1999 | PERMITTANA PRODUCTIONS | 1 8 | | WWW. CONTRACTOR | 6.12 | 27 | | | 0.10 | 3 | 9.75 | 43 | | 8 1 | | | | | | ei rei | | |
| 1991 1 992 | 2.4 | 2 12 | 28.82 25.25 | AND RESERVED TO SERVED AND ADDRESS. | 2.41 1.82 | 22 9 | | | 0.51 | 7 5 | 18.18 | | 0.36 0.61 | 4 | | | | | 0.43 | 2 | | |
| 1993 | | | | | | | | A. C. C. C. | | 9 | | 1000 LC 1000 F-127 W-147 | | DECEMBER OF STREET | | | | | | (1) n (1) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | |
| 1994 1995 | 3.7 | 7 21 | 45.32 22.98 | | 9.67 3.41 | 32 19 | | | 0.54 | 3 | 3,32 0.72 | 11 4 | 0.30 | 1 | | | | William Al | MW | | | |
| 1996 | 4.4 | 5 25 | 39.54 | 222 | 2.97 | 17 | | | | | 0.33 | 0.000 | | | | | | | | | | |
| 1997 1998 | 1.5 2.7 | 0 8 0 15 | | 210 220 | 8.90 2.00 | 46 11 | 263 | *************************************** | 0.70 | 4 | 1.70 1.40 | 9 8 | i, | | | | | . 3110 | 81,238 | | | |
| | | | | | | | | Femal | e age c | ompos | ition by | harve | est year | | | | | | | | | |
| 1980 | | | 45,57 | | 3.80 | 3 | | 11-1997 | () () () () | | 2.53 | 2 | Yan in | | | | | | | FEE: 73 | | |
| 1981 1982 | - | | 62.96 | 51 | | | | | 2.47 | 2 | | | * (<u>*</u> | S.2.3 | | | | | | | (0) <u>503-</u> 7 | |
| 1983 | | | 53.05 | | | | | | | | 0.36 | 2 | 0.18 | 1 | | | a security (3) | | | | | |
| 1984 1985 | :: 150 | | 38.43 25.74 | ****** | CONTRACTOR CONTRACTOR | | 0.21 | , , , L | | | 3.93 11.55 | 19 35 | 0.99 | 3 | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | |
| 1986 1987 | | | 18.75 | | tadhi. | | | | | | 6.25 | 1 | | | | | | | | | | |
| 1988 | 0. | 09 | 1 18.69 | dear are and and | ust the electronist to those | JAN100900000 | 0.09 | 1 | 0.18 | 2 | 22.36 | \$4000 MONTH OF STREET | 0.81 | 8 | | | M COS ASSESSMENT | | | | | |
| 1989 1990 | | | 33.74 36.96 | ubproduktive vigoverene | nomeno monociti di commo | omen describeration and | | | | - 24 | 4.38 14.96 | 41 66 | 0.64 | 6 1 | | | | | | | | |
| 1991 1992 | | | 25.44 20,81 | CONTRACTOR CONTRACTOR | ences, respectively | earch/palestropieses | | | es de la companya de | | 19.55 22.62 | | 0.70 0.2 | 4 | | | | | 0.22 | 1 | | |
| 1993 | | | | • | | 107E-102-00-00-CING | | | | | | 000000000000000000000000000000000000000 | | | | | | | | | | |
| 1994 1995 | | | 23.87 59.25 | 600333300 JBM NAS | 12.09 8.26 | 7.000 PROPERTY. | 0.18 | 1 | 0.6 0.18 | 2 | 4.53 0.72 | 15 4 | 0.3 | 1 | 2007 | | | | | | | |
| 1996 | | | 49.42 | . 277 | 3.13 | 18 | | | | i de la composición dela composición de la composición dela composición de la compos | 0.16 | 1 | Na | | | | | | | | | |
| 1997 1998 | 0.2 | 0 1 | 35.40 49.60 | MANAGEMENT CONTRACTORS | 10.6 1.10 | 55 6 | | Ma | 0.20 | 1 | 0.80 2.40 | 4 13 | 0.20 | 1 | | | i kan | | | | | |
| 1000 | Mr. 1, a -861 | | 02.40 | 77 | <i>5</i> 07 | | | | | oth Se | | 2 | | | | | | | | | | |
| 1980 1981 | | | 93.81 | 76 | 1.24 | - 1 | | | 4.94 | 4 | 2.53 | | | | 2 800 | | and the second | | | | | |
| 1982 1983 | | | | | | | | a (25) | | | | | | ** | | | North Control | | | | | |
| 1984 | | Marie II | 91,74 | 444 | 2.48 | 12 | 0.21 | 1 | | | | | | | | | 9072 | | | | | |
| 1985 1986 | | | 52.14 62.50 | 158 1 10 | 20.13 31.25 | 61 5 | 0.33 | 1 | | | 6.25 | 80 1 | 0.99 | 3 | | | | | | | | |
| 1987 1988 | | | 1 38.94 | • | | | | | | | | | | | | | | West 1 | | | | |
| 1989 | 0. | 43 | 4 80.10 | 758 | 6.26 | 58 | | | 0.10 | 1 | 11.62 | 111 | 1.50 | 14 | | | | | | ************************************** | | |
| 1990 1991 | 1, | 81 | 8 61.90 54.26 | | 10.43 5.80 | | | | 0.68 0.51 | 3 7 | 37.73 | 322 | 1.06 | 8 | | | | | 0.65 | 3 | | Land |
| 1992 | 2, | 42 1 | 2 46.06 | 228 | 3.44 | 17 | | | | | 46.26 | 229 | 0.81 | 4 | | | | | | | | |
| 1993 1994 | | - | 69.19 | 229 | 21.76 | 72 | 2501 | | 0.60 | 2 | 7.85 | 26 | 0.60 | 2 | | | Coall | | | | | |
| 1995 1996 | 3. | 77 2 | 1 82.23 5 88 .98 | 458 | 11.67 | 65 | 0.18 | 1 | 0.72 | | 1.44 0.49 | 8 | | | | | | *** | | | | |
| 1997 | 1.7 | 70 9 | 76.10 | 393 | 19.50 | 101 | | | 0.20 | 1 | 2.50 | 13 | | | | | | | | recented | CONTRACTOR NAMES | |
| 1998 | 2.7 | 0 15 | 89.50 | 495 | 3.10 | 17 | | 14024 | 0.70 | 4 | 3.80 | 21 | 0.20 | 1 | | V V | | | | | | |

Appendix B. East Nuka Bay: age, and mean length and weight (± Standard Error; SE) of the commercial sockeye salmon catch by brood year and age group. Dashed line indicates no data were collected during that brood/harvest year, italics indicate escapement data. Calculated means reflect corrections made to previously reported data.

| | Age Group |
|-------------------------------------|--|
| Year 0.2 SE n 0.3 SE n 0.4 SE n 1.1 | 1 SE n 1.2 SE n 1.3 SE n 1.4 SE n 2.1 SE n 2.2 SE n 2.3 SE n 2.4 SE n 3.1 SE n 3.2 SE n 3.3 SE r |
| | Male mean length (mm) by brood year |
| 1970 | 603 NA J |
| 1971 | 613 2.68 59 550 4.00 2 |
| 1972 | 482 15.53 4 56 546 25.63 5 |
| 1973 617 16.00 2 1974 | 402 13,33 4 |
| 1975 | |
| 1976 | |
| 1977 | 589 7.53 3 534 NA 1 577 2.92 51 569 8.50 2 526 2.98 23 582 6.17 19 |
| 1978 546 8.39 3 | 512 3.39 35 573 3.78 59 511 8.76 8 573 4.35 13 |
| 1980 512 NA 1 | 506 2.09 154 571 1.82 144 508 4.65 14 508 570 |
| 1981 | 500 5.16 18 |
| 1982 | |
| 1983 | |
| 1985 617 NA 1 | 518 4,00 45 576 2.00 229 503 2.00 76 574 3.00 58 |
| 1986 530 NA 1 585 18.00 3 | 497 3.00 65 579 3.00 96 — 516 6.00 22 — |
| 1987 | 504 6.00 15 568 567 520 568 7.00 16 |
| 1988 579 | 557 520 568 7.00 16 515 582 2.00 86 505 2.00 48 578 NA 1 |
| 1990 | 500 2.00 58 580 100 202 350 7.00 2 548 NA 1 |
| 1991 | 524 2.00 116 585° 3.00 71 588° 6.00 19 |
| 1992 | 531° 2,00 94 580° 2,00 210 510° 10,00 13 569° 8,00 5 526° 5,00 66 566° 2,00 146 513° 8,00 11 |
| 1993 1994 | 526° 5.00 66 566° 2.00 146 513° 8.00 11 494° 3.00 47 |
| 1994 | Female mean length (mm) by brood year |
| 1970 | 394 NA.) I |
| 1971 | 579 NA 1 587 3.50 71 528 NA 1 |
| 1972 | 587-2.29 92 505-12.97 4 |
| 1973 574 12.00 2 1974 33 | 524 13.65 8 50 NA |
| 1974 1975 | |
| 1976 | |
| 1977 | 592 NA 1 572 3.48 3 554 3.00 2 547 NA 560 1.86 70 544 3.00 2 504 4.91 23 530 8.87 10 |
| 1978 | 560 1.86 70 544 3.00 2 504 4.91 23 530 8.87 10 500 3.36 48 549 2.37 82 340 NA 1 485 5.81 17 539 4.67 22 |
| 1979 562 18.50 3 1980 549 NA 1 | 490 1.96 159 549 1.52 160 498 5.60 29 565 NA |
| 1981 547 NA 1 | 487 4.50 36 506 NA 1 503 NA 1 |
| 1982 | 559 3.00 66 |
| 1983 1984 | 558 3,00 55 508 4.00 36 565 5.00 28 551 9 500 5,00 24 557 2,00 88 549 NA 1 325 NA 1 511 9,00 9 550 3.00 56 517 NA 1 |
| 1984 | 504 3.00 56 549 1.00 296 585 NA 1 481 2.00 87 553 3.00 75 |
| 1986 512 NA 1 553 8.00 6 | 482 3 00 93 555 3 00 133 |
| 1987 | 491 4.00 30 551 |
| 1988 | 556 504 560 6,00 18 473 NA 1 491 556 1,00 86 604 NA 1 493 2,00 79 570 0,00 3 |
| 1989 | 491 556 1.00 86 604 NA 1 493 2.00 79 570 0.00 3 492 1.00 90 556 1.00 287 530 26.00 3 |
| 1990 488 1991 | 505 100 176 558° 300 79 560° 30.0 2 546° 5.00 20 545° NA |
| 1992 | 508° 2.00 131 550° 1.00 210 488° 5.00 16 535° 7.00 15 |
| 1003 | 509° 3,00 105 536° 1.00 126 495° 5.00 22 |
| 1994 48 | 5° NA 1' 485° 2.00 118 -continued |
| | -communed |

^a Delight Lake escapement; ^b Desire Lake escapement; ^c Delight and Desire lakes escapements combined

| | n 1.1 SE n 1.2 SE n 1.3 SE n 1.4 SE i | n 2.1 SE n 2.2 SE | n 2.3 SE n 2.4 | 00 |
|--|--|---|---|---------------------------------|
| 10a 0.2 St. II 0.3 St. II 0.4 St. I | | e mean weight (kg) by brood | | SE n 3.1 SE n 3.2 SE n 3.3 SE n |
| | Marc | mean weight (kg) by blood y | year | |
| 1977 | | | 3.37 0.15 3 | |
| 1978 | 3.14 0.06 51 3.10 0.05 2 | 2.35 0.0 | 5 23 3.16 0.15 10 | |
| 1979 2.87, 0.49 3 | 2.18 0.05 35 3,23 0.10 29 | | 5 2 3.13 0.12 10 | |
| 1980 2.55 NA 1 | 2.18 0.05 54 3.12 0.04 94 | | 2 6 | |
| 1981 | 2.16 0.08 9 | | | <u> </u> |
| 1982 1983/ | 3,53 0.10 3 | | 3.55 0.25 6 | |
| 1984 | 2.20 0.45 2 2.58 0.33 10 | 2.35 U.4 | 7 2 3.70 NA 2 | 2,48 NA 1 |
| 1985 | 2.20 0.43 2 2.38 0.33 10 | 7 69 N 1 | 3.70 NA 2 8 4 2.33 0.24 4 | 2.11 NA 1 |
| 1986 2.10 NA 1 | 2.34 0.12 8 2.35 0.16 14 | | 4 2.33 0.24 4 4 5 | |
| 1987 | 1.61 0.27 2 | | | |
| 1988 | 2.76 | 1.85 | 2.84 NA 1 | |
| 1989 | 2.07 3.07 0.19 8 | 1.80 0.0 | 5 10 | 44 cm. |
| 1990 | 1.78 0.10 7 3.21 0.08 22 | 0.63 0.01 2 | | |
| 1991 | 2.35 0.07 15 124 0.27 7 | | 2.68 0.14 9 | |
| 1992 | 2.23° 0.06 12 3.12° 0.04 131 2.37° 0.09 43 | 2.19° 0.18 | 8 7 | |
| 1993 1994 | 2.37= 0.09 43 | | | |
| 1994 | Fema | le mean weight (kg) by brood | vear | |
| | | o mean weight (ng) by crook | year | |
| 1977 | 2,80 NA 1 | | 2.62 0.05 3 2,20 N | VA - 1 |
| 1978 | 2.74 0.06 70 | 1.92 0.06 | 5 23 2.38 0.11 6 | |
| 1979 2.65 0.34 3 | | | | |
| | 1.91 0.04 48 2.63 0.04 45 | | 5 6 2.66 0.12 10 | |
| 1980 | 1.84 0.03 54 2.65 0.03 95 | 1.94 0.08 | 8 16 | |
| 1980 1981 | | 1.94 0.08 | 8 16 1.95 N | |
| 1980 1981 1982 | 1 84 0.03 54 2.65 0.03 95 1 88 0.06 21 | 1.94 0.08 | 8 16 6, 1.95 N 2.89 0.17 5 | |
| 1980 1981 1982 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 2.69 0.37 4 | 1.94 0.08 | 8 16 1.95 h 2.89 0.17 5 2.6 2.65 0.25 2 | |
| 1980 1981 1982 1983 1984 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 | 1.94 0.08 | 8 16 6, 1.95 N 2.89 0.17 5 | 224 NA 1 3 |
| 1980 1981 1982 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 | 1.94 0.08 | 8 16 1.95 N 2.89 0.17 5 2.6 2.65 0.25 2 3.07 0.15 4 9 13 1.99 0.08 16 | 224 NA 1 3 |
| 1980 1981 1982 1983 1984 1984 1985 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 2.69 0.37 4 2.45 0.20 2 2.48 0.11 8 1.80 0.17 8 2.87 0.05 38 1.91 0.09 10 1.99 0.05 27 1.43 0.08 7 | 1.94 0.08 | 8 16 1.95 N 2.89 0.17 5 2.66 2.65 0.25 2 3.07 0.15 4 2 13 1.99 0.08 16 | 224 NA 1 3 |
| 1980 1981 1982 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 | 1.94 0.08 1.85 0.15 1.89 0.05 1.37 0.16 2.19 | 8 16 195 N 2.89 0.17 5 2.65 0.25 2 3.07 0.15 4 9 13 1.99 0.08 16 10 5 2.38 | 2.24 NA L. |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 | 1.94 0.08 1.85 0.15 1.89 0.05 1.37 0.16 2.19 | 8 16 1.95 N 2.89 0.17 5 2.6 2.65 0.25 2 3.07 0.15 4 9 13 1.99 0.08 16 | 2.24 NA L. |
| 1980 1981 1982 1983 1984 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 2.45 0.20 2 2.48 0.11 8 1.80 0.17 8 2.87 0.05 38 1.91 0.09 10 1.99 0.05 27 1.43 0.08 7 2.32 1.83 2.33 0.11 6 1.57 0.11 4 2.57 0.05 26 | 1.94 0.08 1.83 0.12 1.89 0.05 1.37 0.10 2.19 1.57 0.07 | 8 16 1,95 N 2.89 0.17 5 2.66 2.65 0.25 2 3.07 0.15 4 2 13 1.99 0.08 16 2,38 4 | 2.24 NA 1 a |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1990 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 2.69 0.37 4 2.45 0.20 2 2.48 0.11 8 1.80 0.17 8 2.87 0.05 38 1.91 0.09 10 1.99 0.05 27 1.43 0.08 7 2.32 2.32 2.32 1.57 0.11 4 2.57 0.05 26 2.14 0.07 18 2.71 0.10 17 | 1.94 0.08 1.83 0.12 1.89 0.09 1.37 0.10 2.19 1.57 0.07 | 8 16 1.95 N 2.89 0.17 5 2.6 2.65 0.25 2 3.07 0.15 4 2 13 1.99 0.08 16 2 38 | 2.24 NA 1 a |
| 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1990 1990 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 | 1.94 0.08 1.83 0.12 1.89 0.05 1.37 0.10 2.19 1.57 0.07 | 8 16 1.95 N 2.89 0.17 5 2.6 2.65 0.25 2 3.07 0.15 4 2 13 1.99 0.08 16 2 38 | 2.24 NA 1 a |
| 1980 1981 1982 | 1.84 0.03 54 2.65 0.03 95 1.88 0.06 21 2.69 0.37 4 2.45 0.20 2 2.48 0.11 8 1.80 0.17 8 2.87 0.05 38 1.91 0.09 10 1.99 0.05 27 1.43 0.08 7 2.32 2.32 2.32 1.57 0.11 4 2.57 0.05 26 2.14 0.07 18 2.71 0.10 17 | 1.94 0.08 1.83 0.12 1.89 0.09 1.37 0.10 2.19 1.57 0.07 | 8 16 1.95 N 2.89 0.17 5 2.66 2.65 0.25 2 3.07 0.15 4 2 13 1.99 0.08 16 2.38 | 2.24 NA 1 a |

| | | | | | | | | Age | Group | | | | | |
|---------------------|--|---|---|--|------------|--------------|---|---|------------|--|---|-------|---|----------------------------|
| Year | 0.2 | 0.3 | 0.4 | 1.1 | 1.2 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2.4 | 3.1 | 3.2 | 3.3 |
| | | | | | Male har | vest (nun | nber o | f fish) | by brood | year | | | | |
| | | | | | | 2.0 | ******* | Markaga ka | | | | | i ara on mornocala | |
| 1977 | | | | | | | | | | | | | Same and Africa | 209 |
| 1978 1979 | | | | | | | | Constitution S | | 2.012 | | | | |
| 1979 | | | | | | 30,057 | | | 2,922 | 2,713 | | | | 28 |
| 1981 | | | | | 3.757 | 30,037 | | | L,7LL | | | | | 20 |
| 1982 | | | | -4° - 100 | | | A | | | 1,993 | | | | |
| 1983 | | | | | | 1,123 | | | 562 | 466 | | | | 7 |
| 1984 | | | | | 281 | 2,579 | | | 93 | 242 | 00.0 Proc. 2000.000.00 ABST | | 4 | |
| 1985 | | 31 | | | 1,398 | 1,401 | | | 453 | 216 | | | | |
| 1986 | 31 | 14 | an conservation of | | 408 | 358 | | | 82 | | | | | |
| 1987 1988 | | | | | 56 | 470 | | | 166 | 728 | | | | |
| 1988 1989 | | 28 | | | 353 | 478 1,054 | | | 166 588 | 196 22 | | | | |
| 1990 | | 40 | | | 710 | 4,508 | 4.3 | 24 | 22 | - 44 | | | | |
| 1991 | | | | | 2,588 | 1,500 | | 2. | 22 | 181 | | | | |
| 1992 | | | ****** | | en a tama | 1,973 | in Marie La | | 125 | 160 | | | | |
| 1993 | | | | | 624 | 4,764 | | | 352 | | | | | |
| 1994 | | | | | 1,535 | | | | | | | | | |
| | | | | I | Female har | rvest (nur | nber o | f fish) | by brood | year | | | | |
| \$000 | | * | | | | | | 3.00 | *** | | | | | |
| 1977 1978 | | | | | | | 2.2.40 | | | | | | | 209 |
| 1978 | | | | | | | | | | 4,592 | | | | |
| 1980 | | | | | | 33,395 | | | 6,053 | | | | | 28 |
| 1981 | | 209 | | | 7,514 | | | | | | 28 | | 28 | |
| 1982 | | | | *************************************** | | | | | | 1,854 | | ***** | *************************************** | |
| 1983 | | | | | | 1,544 | | | 1,011 | 870 | T. | | | 15 |
| 1984 | | | | | 674 | 2,734 | 5 | 28 | 280 | 320 | | | 4 | |
| 1985 | 21 | 31 | | | 1,740 | 1,789 | 4 | | 501 | 279 | | | | |
| 1986 1987 | 31 | 28 | | | 567 112 | 494 | | | 142 | 713 | | | | |
| 1988 | | | | | 112 | 471 | | | 208 | 220 | | | 12 | |
| 1989 | - | | | | 367 | 1,053 | 22 | | 968 | 67 | | | 12- | |
| 1990 | 7 | erroux.comitive. | * ************************************* | | 1,103 | 6,403 | | 0.000 (NO. | 67 | on en el est | , 147 4 | | 4.4 | |
| 1991 | | | | | 3,917 | | | | | 187 | | | | 32. |
| 1992 | (6) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1 | 000000000000000000000000000000000000000 | 0.000.000000000000000000000000000000000 | Bank 100 B 1 | | 1,986 | 960998000000000000000000000000000000000 | 000000000000000000000000000000000000000 | 150 | 496 | NATIONAL PROPERTY OF THE PARTY | | and any other transfer of the second of the | 2002.000.000.0000.0000.000 |
| 1993 | | | | | 987 | 4,092 | | | 719 | | | | | |
| 1994 | | | | 12 | 3,837 | | | | | | | | | |

| Appendix | B. cont'o | l (Nuk | a E | Bay: p | ige 4 | of 4). | | | | | | | | | | | | Α | ge Grou | ıp | | | | | | | | | | | | | | |
|-----------------------|---|---------------------|----------------|-----------------------|----------|-----------------------|----------|-----------------|---------------|--------------|--------|------------------------|------------------|---------------------------------------|---|--------------------|----------------------|------------|-------------|-------------|------------------------|-----------|----------------|-----------|---|-----------|-------------|------------------|-------------|---------|----------|------------------|-----------|-------------------------------|
| Year | 0.2 | n | | 0.3 | п | (|).4 | n | 1. | .1 | n | 1.2 | n | 1.3 | | n | 1.4 | n | 2.1 | n | 2.2 | n | 2.3 | | n | 2.4 | n | 3.1 | <u> </u> | n | 3.2 | n | 3.3 | n |
| | | | | | | | | | | | | | | | Ma | le age | compo | sition | by har | est year | r | | | | | | | | | | | | | |
| 1977 | | i siya | | | | 4.2 | | | 140 | | | 1.29 | 4 | 18.0 | | 56 | | | | | 1.61 | 5 | - 19.0 | 3 5 | 59 | 0.32 | 1 | | | | 0.65 | 2 | | |
| 1983 1984 | 0.38 | 1 | 56,00000 | 1.13 | 3 | | (24) | | | | | 13.21 29.90 | 35 154 | 19.2 11.4 | | 51 59 | 0.39 | 2. | | | 8.68 1.55 | 23 - 8 | 1.13 <*3.69 | | 3 9 , 5 | | | | | 5.65.30 | | | | 94.34.3 |
| 1985 1 986 | | | uos | 139 | ara | | | | | ********* | | 4.10 | 18 | 32.80 | | 144 | | _ | | | 3.19 | 14 | 2.96 | 1 | 13 | | | | | | + | | 0.23 | 1 |
| 1987 | 2444 E. T. 15 T. 16 E. 16 E | 20 Este Se. | | Tarro (Chab) | | | | | | | | | | | | _ | | | | | | | | | | | | | | | | | | |
| 19 88 1989 | 0.30 | i | 93 | 0.30 | 1 | | 786. | | | | | 3,06 13.60 | | 25.09 |) | 40 83 | | • | | | 6.1 2 0.90 | 20 3 | 21.7 4.53 | | /1 5 | | | | | | | | 0.30 | . 1 |
| 1 990 1991 | Kalindardi i | CA SOMER. | 2 icon | 0.24 | 3 | e postaleje | المأهلك | | derisk | e do la la | 313550 | 7.12 3.16 | 65 15 | 24,40 20.19 | | 2 29 96 | (Alican) | útrica | Miles Sala | | 7.91 4.62 | 76 22 | 4.22 12.1 | | 13 .8 | 10.28.66 | | | | | 0.23 | (2) (2) (2) 1 | 0.39 | 2 |
| 1992 1993 | | 27.0 | | | | • | | | -:: | | | | | | | | | | | | | | | | ,0 | ***** | | 4 | - | | ***** | | 0.37 | 2 |
| 1994 | | | | Jan. | äż. | S. | | | | | 57.4 | 11.98 | 58 | 17,7 | 200000000000000000000000000000000000000 | 86 | | | 0.40 | 2 | 9.92 | 48 | 3.31 | | | | | | | | | | | |
| 1995 1 99 6 | No. | 439 | | | | | | (XX) | | | | 14.68 24.94 | | | u | 202 71 | | | | | 0.12 | I | 0.12 | | | | | | | | | | | |
| 1997 1 998 | | V-100 | 946 | | | | | | | | | 10.00 - 9.60 | | 31.60 29.8 0 | | 210 146 - " | | | | | 2.00° 2. 20° | 13 11 | 2.90 1.00 | | 19 5 ' ' ' | | | | | | | | | |
| | | | | | | | | | | | | | | | | | e com | positic | on by ha | rvest ye | 11 | | | | | | | | | | | | | |
| 1977 | | 3,61 | | 0.65 | | the constitution | ig 1964 | ante. | -0,7 | 32 | 1 | 2,58 | | 29,6 | | | 0.32 | 579 | 0.20 | | 1.29 | | | | | 0.32 | 1 | | | | 0.32 | 1 | | 22.5 |
| 1983 1984 | THE | | | | 3 1 | | | 4 (4.4) | *** | | | 18.12 30.88 | | | 2 | 82 | 0.38 0.39 | 2 | 0.38 | 1 | 8.68 3.30 | 23 17 | 1.13 1.94 | | 3 (0 | 0.39 | 2 | | | | | | | |
| 1985 1986 | | | | 0.23 | . I | | | | | | | 8.20 | 36 | 36.4 | | 160 | ***** | | | | 6.61 | 29 | 5.01 | 2 | .2 | | | | | | | | 0.23 | 1 |
| 1987 1988 | 1:33488 | 46,35 | | 27328 | | | | | | | | 7.34 | 24 | 16,8 | 2 | | | A STATE OF | 0.30 | 1 | 11.01 | 36 | 20,1 |) 6 | | 0.30 | 1 | | - | | 0,30 | 1 | 0.30 | CAC AC A CACACATOR STORE SALE |
| 1989 1990 | 0.30 | 1 | | 0.30 0.49 | l £ | | 39.65 | | | | | 16.91 9.90 | 56 | 26.60 31.2 |) | 88 | 0.09 | 1 | - | - | 2.71 8.75 | 9 87 | 8.46 | 2 | | | | | | | 9,54 | | 0.30 | |
| 1991 | 010434501545 - 2000000044 | | | V.42 | er er | | consta | | | 3.28 (3.0) | | 6.32 | 30 | 27.80 | | | 0.23 | 1 | | | 8.01 | 38 | 5,59 15,74 | ر. 1 7 | | | | | | | 0.23 | 1 | 0.85 | 4 |
| 1992 1993 | Di Sara i | ha Thair | 200 | ****** | S40 | 7.0 x . 7. | | | : | T. T | 1.22 | | | | (1.1.) A.M | | | | | 8 8 A 7 g 1 | | | | | | | | **** | • | | | | ***** | |
| 1994 1995 | | 8 (199 | | | | | | | | | | 18.61 22.28 | 90 176 | 17.70 36.33 | | 86 287 | 0.12 | l | | | 16,33 0.38 | 79 3 | 3,71 0,38 | | *************************************** | | | | | | 0.20 | 1 | | |
| 1 99 6 1997 | 32,717,111,111 | | | 7026 | | 14 | | | 0.2 | one. | , | 35.06° 15.80° | ' 131 | 20.99 | a . | 7 9 211 | | | 0.30° | 2 | 2.40° | 16 | 3.00 | 18. | | | | | | | | | | h. Jan |
| 1998 | | W. IA | i ECN | | . June | - 3 | | | | .0 | 7 | | | 25:6 | | | | 1.5 | | 2 | | | | | | | | | | | | | 0.204 | 1 |
| | | | | | | | | | | | | | | | | | | oth Sea | xes | | | | | | | | | | | | • | | | |
| 1977 1983 | 0.38 | 1 | | 1.30 2.26 | . 4 6 | out. | | A College | 0.2 | 32 | 1. | 3. 87 31.33 | 12 83 | 47.7. 45.66 | | | 0 .32 0.38 | 579 1 | 0.38 | l | 2.90 17.36 | 9 46 | 41,93 2.26 | 13 6 | | 0.64 | 2 | | | | 0.97 | 3 | | |
| 1 984 1985 | 60.740 | | | 0,19 0.23 |] | | | | | .1. | | 60. 78 12.30 | 313 54 | 27.3 8 69.25 | | |).78 | 4 | | | 4.85 9.80 | | | | 9 | 0.39 | 2 | 1 | Later IV | | 4. | | 0.46 | 2 |
| 1986 | | | elini. | ///// | | | | | | | | | | · · · · · · · · · · · · · · · · · · · | - | | <u>-</u> | 7. | | | | | | 1. | | ; | 23 | . To | Sau Ni | u j | | | 0.40 k | ۷. |
| 1987 1988 | | | æ | } | | | /*: | | | | | | 7 34 | 29.05 | | 95 | | | 0,30 | 1 | 17.13 | 56 | 41.90 | | | 0.30 | _1_ | ا داداند | - دندانت | ۔ ین | 0.30 | 1 | 0.60 | 2 |
| 1989 1 99 0 | 0.60 | 2 | | 0.60 0.73 . | 2 - 9 | | | | | | | 30.51 27.02 | 101 - 158 | 51.69 55.69 | | 71 i25 - i | 0.09 | 1 | | | 3.61 16.66 | 12 163 | 12.99 9.81 | | | | | 4.2 | | | | | | |
| 1991 1 992 | | 244.000 | | | | | | | | | | 9.48 | 45 | 48.05 | | economico contrata | 0.23 | 1 | | | 12.63 | 60 | 27.92 | 13 | 33 | | | | | | 0.46 | 2 | 1.24 | 6 |
| 1993 1 994 | STANDARD | | renii Veril | ene suo | | - Para 100 M | | occurrent (ETA) | | | | 30,59 | 148 | | | | | | 0.40 | 7 | 26,25 | 127 | and the second | . 34 | 4 | | umphra 2004 | , and the second | national W | | 0.20 | 1 | | |
| 1995 | est is substitutely | siaddidd Toerwoo | Harri | Sales Sales | alan di | ak inii. | | | | | | 36.96 | 292 | 61.91 | . 4 | 89 (| 0.12 | ì | UMU | 4 | 0.50 | 4 | 0.50 | 4 | 1 | | | and the | | | u,zu | i kare | | |
| 1 996 1997 | solio E. Rii | | | 13.43.59 A | 9, 4. | 85 (L) | <i>0</i> | | 0.2 | 2 <i>0</i> F | I | 60.00° 25.80° | 171 | 63.40 | c 4 | 50 121 | | | 0.30° | 2 | 4.40° | 29 | 5.90 | 39 | | | | ALL: | | | 3.000 | u.U: | | *** |
| 1998 | 11 | 1 | | | | 10,14 | 11.0 | 41 | | | | 33,60 | -165 | 55.40 | ⁴ 2 | 72 | | | | | 6.70" | : 33 | 4.10 | - 20 | 0 💆 | 2 | | | 100 | | | | 0.20° | -1 |

Appendix C. Aialik Bay: age, mean length and weight (± Standard Error; SE) of the commercial sockeye salmon catch by brood year and age group. Dashed line indicates no data were collected during that brood/harvest year; italics indicate escapement data. Calculated means reflect corrections made to previously reported data.

| Year 0.2 SE n 0.3 SE n 0.4 SE n 1.1 SE n 1.2 SE n 1.3 SE n 1.4 SE n 2.1 SE n 2.2 SE n 2.3 SE |
|--|
| 1978 |
| 1979 502 3.56 89 581 2.43 93 648 NA 1 |
| 1979 502 3.56 89 581 2.43 93 648 NA 1 |
| 1980 355 25 00 2 515 2.78 116 569 2.71 85 |
| 1982 — 496 — 581 5.00 1983 — 561 NA 1 — 517 3.00 58 590 2.00 214 610 4.00 2 539 5.00 19 610 9.00 1985 561 NA 1 — 513 3.00 65 613 4.00 50 545 2.00 126 571 3.00 1986 659 NA 1 367 4.00 2 541 5.00 73 566 4.00 38 498 7.00 22 1987 478 NA 1 496 8.00 29 1989 1989 1991 568 2.00 110 534 NA 1 513 3.00 64 1992 337 NA 1 570 7.00 36 — 508 2.00 2 |
| 1983 |
| 1984 |
| 1985 |
| 1986 |
| 1987 478 NA 1 496 8.00 29 1988 1989 1990 1991 1991 1992 19 |
| 1988 1989 1990 1991 1991 513 3.00 64 1992 337 NA 1 570 7.00 36 508 2.00 2 |
| 1989 1990 1991 1991 513 3.00 64 1992 337 NA 1 570 7.00 36 508 2.00 2 |
| 1990 568 2.00 110 534 NA 1 1991 513 3.00 64 1992 337 NA 1 570 7.00 36 508 2.00 2 |
| 1991 513 3.00 64 1992 337 NA 1 570 7.00 36 508 2.00 2 |
| |
| 1993 501 4.00 21 |
| |
| 1994 |
| Female mean length (mm) by brood year |
| 1978 557 2.85 43 546 10.82 5 530 na 1 565 6.25 |
| 1978 499 2.27 119 557 2.22 100 512 7.75 4 548 5.25 |
| 1980 493 2.23 117 551 1.76 103 493 4.11 19 547 |
| 1981 539 NA 1 497 4.59 17 544 501 |
| 1982 564 3.00 |
| 1983 555 2.00 110 506 9.00 17 579 6.00 |
| 1984 516 NA 1 502 2.00 110 563 1.00 274 632 NA 1 526 4.00 27 594 6.00 |
| 1985 506 3.00 70 579 4.00 56 520 2.00 137 547 2.00 |
| 1986 529 3.00 66 544 3.00 68 501 4.00 37 |
| 1987 496 5.00 29 |
| 1988 1989 542 NA 1 518 NA |
| |
| 1000 5AS 1:00 101 |
| 1990 548 1.00 191 496 15.0 5 |
| 1991 497 1.00 154 |
| 1991 497 1.00 154 |

| 'n | ۰ | | | |
|----|---|---|---|--|
| ١ | ۰ | - | • | |

| Appen | dix C | C cont'd | (Aiali | k Bay: | page 2 | of 4). | | | | | | | | | | A | ge Gro | oup | | | | | | | | | | | | | |
|-------------------------------|-------|--------------------|--------|--------|----------------|--------|-------|----|---|------|----|---|------------|-----------------------------------|---|----------------------|--------------|--------|-----------------|----|---|------|----|---------|---------|------------------------------|-------|--------|--------------|------------|--------------|
| Year | 0.2 | SE | n | 0.3 | SE | n | 0.4 | SE | n | 1.1 | SE | n | 1.2 | | | | | | 1.4 ood year | | n | 2.1 | SE | n | 2 | 2 5 | SE | n | 2.3 | SE | n |
| 1978 1979 | 345 | | | • | | | | | | | | | | 6 38.0 | | 3.34 | 0.10 | 38 | 4.80 | | 1 | | | | 2. | 37 (|).28 | 2 | 3.76 | 0.14 | 1 14 |
| 1980 1981 1982 | | | | | | | ***** | | | | | | | 3 0.16 | | 2.96 | | 51 | | | | 1.30 | NA | 1 | 2. | | .12 | | | | 4 |
| 1983 1984 | · · | ÷. | | | | | | | | | | | 2.4 | - 4 0.19 |) 6 | 3.37 3.80 | 0.35 0.16 | | | | | | | | 1 2. | 55 N 45 N | ١A | 1 1 | 3.45 3.10 | 0.50 NA | 2 1 |
| 1985 1986 * 1987 | | | | | | | | | | 0.80 | | | 2.4 | 9 0.22 8 0.52 0 0.22 | 4 | 3.69 2.96 | | 7 5 | | | | | | | | | | | 2.86 | | |
| 1988 1989 | | | S | | | | | | | 0.00 | | | , | | | | | | | | | | | | | | | | | | |
| 1990 1991 1992 | | | | | | | | | | | | | 2.4 | 7 0.14 | A. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | 3.28 | 0.10 | 16 | | | | | | | | | f 115 | | | | |
| 1993 | | - | | | | | | | | | | | | - | | | 1 | | | | | | | | | | | | | | |
| - | | | | | | _ | | | | | | | | Female | mear | weigh | t (kg) l | by bro | od year | | _ | | | | | | | | | | |
| 1978 1979 1980 | | * | | | | | | | | | | | 2.0 | 3 0.05 | 43 | 2.94 2.93 3.04 | 0.05 | 59 | 2.85 | NA | 1 | | * | | 2.3 | 55 0 33 0 56 0 | .08 | 2 | 3.00 3.20 | 0.10 | |
| 1981 1982 | 3.53 | uja garani | | 2.95 | NA | 1 | | | | | | | | 8 0.08 | | | | | | | | | | | | | | | 3.40 | 0.13 | 3. |
| 1983 1984 1985 | | • | 1157 | | | | | | | | | | | - 8 0.13 7 0.14 | | 2.99 | | | | | | | | | 1. | 20 0 3 0 0 02 0 | .05 | 2 | | | 1 1 25 |
| 1986 1987 | | | | | | | | | | | | | 1.8 1.7 | 5 0.04 6 0.08 | 6 3 5 | 2.42 | | | - | | | | | <u></u> | | | | | 2.0 / | | |
| 1988 1989 1 990 | | sini iista. iin. i | | | and the second | | | | | | | | | | 1 40° 4 0 40° | 2.52 | 0.07 | 22 | | | | | | | 1.9 | i N | JA . | 1 | | | |
| 1991 1992 | | | | | | | | | | | | | | 2 0.05 | 13 | | | | | | | | | | | | | | | | |
| 1993 1 994 | | - | | | | | | | | | | | | - - | | Continu | | | | | | | | | | | | | | | |

Appendix C. cont'd (Aialik Bay: page 3 of 4)

Age Group

| Year | 0.2 | 0.3 | 0.4 | 1,1 | 1.2 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2,4 | 3.1 | 3.2 | 3.3 |
|----------------------|-------------------------------|---|-----------------------------|---------------------------------|---------------------|------------|--|--------------------|---|-------------|-------|--|-------|------------|
| | | | | | | Male harv | est (nu | mber o | f fish) by l | brood year | | | | |
| 1978 | | | | | | | | | | - | | | | |
| 1979 | Valle and the second | SECRETARY 2014 | | KINDO AND LANGUA | | | ACRESSOR AT MARK | and distance | | | | 00000000000000000000000000000000000000 | | |
| 1980 | | | | | | | | | | | ***** | | ***** | |
| 1981 1982 | es una sensi | Todofeská svítě | Salah Akadi Jasi | alahata karita: | - 2040 SSR048 | and South | a in victorial | ur i i i i i i i i | 0.0000000000000000000000000000000000000 | 1,440 | | | | |
| 1983 | 100 | | | | | 3,184 | | | 393 | 1,440 | | | | |
| 1984 | | | 4 | | 2,531 | 3,084 | 29 | | 83 | 174 | | | | |
| 1985 | Alexander Land Section (Se | | and the second | | 347 | 723 | | | 1,824 | 1,020 | | | | * 4.50.000 |
| 1986 | | 14 | | 9 - | 1,056 | 376 | | | 218 | 68 | | | | |
| 1987 | 14 | | | | 287 | 1,115 | | | | 159 | | | | |
| 1988 | | | | | 67 | 256 | | | 287 | | | | | |
| 1989 | CLEXIC VIOLENCE CO | L-AC L. SEA / MORROR | MARKANIA NA TAN | | 798 | | The control of the co | | | 4 | | | | |
| 1990 | | | | | 220 | 408 | | | 4 | | ***** | | | |
| 1991 1 992 | 60 N. YOM (N. Y. | | | 4 | 238 | 542 | | | 30 | | | | | |
| 1992 | | | | | 317 | J44 | | | | | | | | |
| 1994 | | | | | | | | | | | | | | |
| 1995 | | | | | | | | | | | | | | |
| | | | | | | Female ha | rvest (n | umber | of fish) by | brood year | | | | |
| 1 978 1979 | | | | | | | | | | | | 4 | | |
| 1980 | | | | and the second | | | | | | | ***** | | | |
| 1981 | '25 d. 960 (2000) 2000 (2000) | CERTICAL PROPERTY OF THE STATE | | | | | | | | | | | | |
| 1982 | | | | | | | | | | 2,312 | | | | |
| 1983 | | eron en en en en en en en en en | | annica annoch i Tuber ik camina | | 4,799 | 000000000000000000000000000000000000000 | | 742 | 92 | | | | |
| 1984 | | 44 | | **** | 4,800 | 4,262 | 14 | | 118 | 87 | | | | |
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| 1987 | Condition of the | . L. X | | | 233 287 | 1,115 | | | 200 | 160 | | | | |
| 1988 | 447. San | ee s | | | 68 | 255 | | | 287 | | | | | |
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| 1995 | | | | | | | | | | | | | | |
| | | | | | | | ontinue | ъ <u>д</u> | | | | | | |

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Appendix C cont'd (Aialik Bay: page 4 of 4)

| Year | 0.2 | n | 0.3 | n | 0.4 | n | 1.1 | n | 1.2 | n | e Group | n | 1.4 | n | 2.1 | n | 2.2 | n | 2.3 | n |
|----------------------|---|--|----------------------|--|--------------------|------------------------|---------------------------------------|-----------------------|---------------|--|----------------|----------------|---|----------------|---|------------------------------|---------------------|--|---|---|
| | | | | - | | - | *** | • | Male age | | | | | | | | 2.1 | | 2.3 | |
| 983 | | | | | | | 0.71 | 2 | 31.79 | 89 | 7.86 | 22 | | | | | 1.43 | 4 | | ale de la |
| 984 | 9K (50-600), 22-0,6 K00000 (36 | acoustoppes s | | | * | | 0.22 | 1 | 25.61 | 116 | 20.53 | 93 | | 4.00000000 | | | 1.77 | 8 | 1.32 | 6 |
| 985 | | | | | | | | | 5.35 | 17 | 26.73 | 85 | 0.32 | 1 | 0.32 | 1 | 9.43 | 30 | 6.29 | 20 |
| 986 | | | | | | | | | 7.55 | | 9.90 | | | | | | 5.70 | | 26.85 | NOT AUDITED |
| 987 | | | 100 | Section 2 | | | | | | | | 400 | ****** | | | | | | | |
| 988 | and British | -diamagna | -4-2 ACC-000746 | | | | | CHECKER STONE PROBE | 12.50 | 58 | 15,73 | 73 | 0.00/45/02/45033-049 | | NEW COMMENS AND A STORY | Salar au communica | 1,94 | 9 | 7.11 | 3: |
| 1989 | | | | 1 | 0.05 | 1 | 0.11 | 2 | 4.06 13.75 | 65 | 36.12 9.41 | 214 50 | 0.38 | 2 | | | 0.97 | 19 | 1.99 | 3 |
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| 1992 | | (C) | | | | | | | NA | 47 | NA | 36 | | | | | 4.04 | - 44 | 21,69 2,72 | . 10 |
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| 1998 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | Female age | | | | year | | | | | | 0.0-2 | |
| 1983 | | | | | | | | | 42.50 | 119 | 15 36 | 43 | | <u> </u> | | | 0.36 | 1 | | |
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| 988 | NV COSTALIS | en sala | 0.22 | 1 | ere and | | | | 23,71 | 110 | 23.70 | 110 | | | | | 3.67 | 17 | 11.42 | 5 |
| 1989 | | | | | | | | | 4.32 | 70 | 49.92 | 274 | | | | | 1.38 | 27 | 1.08 | 2 |
| 1990 | | | | | | | | | 12.43 | 66 | 10.54 | 56 | 0.18 | 1 | | | 25.80 | 137 | 1.13 | (|
| 1991 | | | ar Guide | | | | | | 6,10 | 29 | 14.31 | 68 | | | | | 7.78 | 37 | 31,38 | 1. |
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| 1986 | - oy merepaniling | 08008 6480 | 000000000000 | | | | | | | | | | 100000000000000000000000000000000000000 | Oloczen | | | | | | Same |
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| 1989 | 812 P.S. (1986) | 200360 | 0.22 | | | | | | 30.21 | | 37.13 | | | | | | 3.01 | 20 | 10.5. | , , |
| 1990 | 0.18 | ************************************** | 0.18 | 1 | | | | | 26.18 | 139 | 19.95 | 106 | 0.56 | 3 | | | 49.54 | 263 | 3.40 | 1 |
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| 992 | erre eggir fraunske ar fire | over describeda | \$40 (CPR FROM State | 200000000000000000000000000000000000000 | 5-00-02-0603-4-0-7 | | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | 10-400 (M-10) | 5.40 | 2 | 89.20 | 33 | | | | 72-11236-095-045-0580-0580-0 | | managan sa | 5.40 | 100 CANADA (100 CA |
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| 994 | | eren in arthur sinci 2000 | exacer energicals | The second secon | | | | | 70.37 | 190 | 18.89 | 51 | | | | | 7.78 | 21 | 2.96 | 8 |
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| 997 998 | 7748 6 . | | | 22.70 | | | | | 20,00 | 40 | J0.UU | 90 | | | u, ru | 1 | 4.10 | | | |

Appendix D. Chenik: age, mean length and weight (+_ Standard Error; SE) of the commercial sockeye salmon catch by brood year and age group. Dashed line indicates that no data were collected during that brood/harvest year; italics indicate escapement data. Calculated means reflect corrections made to previously reported data.

| Pear 12 SE n 0.3 SE n 0.4 SE n 1.1 SE n 1.2 SE n 1.3 SE n 1.4 SE n 2.1 SE n 2.2 SE n 2.3 SE n 1.5 SE n 1.5 SE n 1.5 SE n 2.5 SE n | | | | | | | | | | | | Aş | ge Gre | oup | | | | | | | | | | | | | | | |
|---|-------------------|--------------------------------|---|--|--|--|--|---|---------------|-------------------|--|--|---|--|---|--|--|--|---|--|-------------------------|--|--|---------------------|--|--|---|-------------------------------|---|
| 1978 | Year 0.2 | SE i | n 0.3 | SE | n | 0.4 | SE | n | 1.1 | SE | n | 1.2 | SE | n | 1.3 | SE | n | 1.4 | SE | n | 2.1 | SE | n | 2.2 | SE | n | 2.3 | SE | n |
| 1979 | | | | | | - | | | | | Male | mean l | ength | (mm) l | y broo | d year | | | | | | | | | | | | | |
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| 1993 | | | | | | | | | | | | 304 | . | | 550 | | 124 | | | NEW. | | Y ZAERA | | | E ANN SHO | | 333 ********************************** | NA | |
| Female mean length (mm) by brood year | | | Sicility (Asia) | Sales (A.C.) | Carrier S | | | | 436 | NA | l | 491 | 4 | | hubiduor servición de | A.S. S. | - all Mak | C NORTH CONTROL | 0.07 S.+540.628 | AUSDricts | Charlet to S | | | | Karanga Karanga | | water with | | |
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| 1979 | 100 2002 900 000 | tu amerikan | nort et tolkeete | WONDALLINE NO WO | Salaran de la compansión de la compansió | manani | ereneti a | who cultural deligation | south a least | transpagna (agric | J. T. P. Colony Co. | | (2004) | | = +0 | ~ · | estudenco y c | 200001.000 | TO SERVICE CO | 213-460000 | .900/0588/00 | ZGREENER | (Databan (CO)) | | toransmanur | e-continue | MET VIII | 2000 Sept. | MARKES STATE |
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Appendix D. cont'd (Chenik: page 2 of 4).

Age Group

| Year 0.2 SE n 0.3 SE n 0.4 SE n 1.1 SE | n 1.2 SE r | n 1.3 SE n | 1.4 SE n 2.1 SE n 2.2 SE n 2.3 SE n |
|---|---|---|--|
| | Male mean we | ight (kg) by brood year | |
| 1070 | | 2.64 0.05 36 | |
| 1978 1979 | 2.05 0.06 2 | | |
| 1980 | | 6 2.81 0.07 27 | |
| 1981 | 2.08 0.06 8 | 3 2.20 0.28 4 | 1.75 0.09 12.00 |
| 1982 | 1.64 0.03 8 | | THE PARTY OF THE P |
| 1983 | | 2.60 0.06 49 | 1.98 NA 2.00 2.30 NA 1.0 |
| 1984 ———————————————————————————————————— | 2.05 NA | 3 2.50 0.13 9 1 2.37 0.14 3 | 0.90 NA 1.00 2.18 0.09 4.00 1.99 0.06 3.0 |
| 1986 | 1.82 0.06 2 | | 1.59 0.03 3.00 |
| 1987 | 1.40 0.04 2 | 6 2.10 0.10 16 | |
| 1988 | | 7 2.11 0.06 24 | 2,20 NA 1.0 |
| 1989 | process were decreased in the second spiriture and the process of | 2,19 0.05 44 | 1.70 NA 1.00 2.05 0.25 2.0 |
| 1990 | 1.56 0.02 14 1.65 0.03 8 | 44 2.25 0.02 203 | 2.30 NA 1 |
| 1991 1992 | 1,05 0,05 6 | 2.40 0.03 124 | |
| 1993 2.0 NA | 1 1.59 0.05 2 | | |
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| | | | |
| | Female mean wei | ght (kg) by brood year | |
| 1978 | | 2.05 0.04 46 | |
| 1979 | 1.52 0.03 5 | 2,05 0.04 46 7 2.02 0.06 3 | 3.60 NA 1.0 |
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| 1979 1980 1981 3.00 NA 1.00 1982 1983 1984 | 1.52 0.03 5 1.39 0.03 5 1.88 0.09 1 1.39 0.03 3 | 2.05 0.04 46 7 2.02 0.06 3 5 2.44 0.06 27 3 1.83 0.09 3 7 | 1.46 0.07 9.00 1.55 NA 2.00 1.90 NA 1.0 1.75 0.11 4.00 |
| 1979 1980 1981 3.00 NA 1.00 1982 1983 1984 1985 | 1.52 0.03 5 1.39 0.03 5 1.88 0.09 1 1.39 0.03 3 1.54 0.06 1 1.53 0.09 4 | 2.05 0.04 46 7 2.02 0.06 3 5 2.44 0.06 27 3 1.83 0.09 3 7 2.01 0.05 44 5 2.03 0.12 6 4 2.10 NA 1 | 1.46 0.07 9.00 1.55 NA 2.00 1.90 NA 1.0 1.75 0.11 4.00 1.30 NA 1.00 |
| 1979 1980 1981 1981 3.00 NA 1.00 1982 1983 1984 1985 1986 | 1.52 0.03 5 1.39 0.03 5 1.88 0.09 1 1.39 0.03 3 1.54 0.06 1 1.53 0.09 4 | 2.05 0.04 46 7 2.02 0.06 3 5 2.44 0.06 27 3 1.83 0.09 3 7 | 1.46 0.07 9.00 1.55 NA 2.00 1.90 NA 1.0 1.75 0.11 4.00 1.30 NA 1.00 |
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| 1979 1980 1981 3.00 NA 1.00 1982 1983 1985 1986 1987 1988 1989 | 1.52 0.03 5 1.39 0.03 5 1.88 0.09 1 1.39 0.03 3 1.54 0.06 1 1.53 0.09 4 1.52 0.04 1 1.10 0.04 1 1.48 0.09 1 1.40 NA | 2.05 0.04 46 7 2.02 0.06 3 5 2.44 0.06 27 8 1.83 0.09 3 7 | 1.46 0.07 9.00 1.55 NA 2.00 1.90 NA 1.0 1.75 0.11 4.00 1.30 NA 1.00 1.38 NA 1.00 1.89 NA 1.0 1.38 NA 1.00 1.89 NA 1.0 |
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| 1979 1980 1981 3.00 NA 1.00 1982 1983 1984 1985 1986 1987 1988 1989 | 1.52 0.03 5 1.39 0.03 5 1.88 0.09 1 1.39 0.03 3 1.54 0.06 1 1.53 0.09 4 1.52 0.04 1 1.10 0.04 1 1.48 0.09 1 1.40 NA 1.31 0.03 5 1.29 0.03 5 | 2.05 0.04 46 7 2.02 0.06 3 5 2.44 0.06 27 8 1.83 0.09 3 7 2.01 0.05 44 5 2.03 0.12 6 4 2.10 NA 1 6 1.50 0.03 24 4 1.55 0.11 9 2 1.78 0.05 25 4 1 1.81 0.05 39 2 1.77 0.02 181 7 | 1.46 0.07 9.00 1.55 NA 2.00 1.90 NA 1.0 1.75 0.11 4.00 1.30 NA 1.00 1.38 NA 1.00 1.89 NA 1.0 1.35 0.05 2.00 1.80 NA 1.0 1.10 NA 1.00 |

Appendix D. cont'd (Chenik: page 3 of 4). Zeros indicate that there were no commercial harvests.

| | | | | | | A | Age Group | p | | | | | | |
|--|--|---------------|--|----------------------------|---|--|----------------------------|--|---|----------------------------------|--|---|-----|-------------------------------|
| Year | 0.2 | 0.3 | 0.4 | 1.1 | 1.2 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2.4 | 3.1 | 3.2 | 3.3 |
| | | | | | Ma | ale harvest (| (number o | f fish) by l | prood year | | | | | |
| 1979 - | | | | | | 2.075 | | | 12.55. | | 3,7,30 | | | |
| 1980 1981 | 62667.75 | | | egsakini kari | 750 | 3,875 3,322 | | | 6,091 | | | ENTRESCHE 215 (11) | | |
| 1982 | | | | of the set | 59,250 | 3,344 | 187 | A SAME | 0,091 | 414 | | | | |
| 1983 | | | 3 | Balan a | 37,230 | 63,150 | 107 | | 2,951 | 2,504 | | | | 7 |
| 1984 | | | haran Sara Yakin | | 9,843 | 8,860 | | 1,079 | 4,333 | 588 | (4) | Sans House Call | | 326663 (49) |
| 1985 | | | - 10 | | 4,430 | 9,577 | | | 1,120 | 900 | N. J. S. | The second | | 100 mag 100 mag 100 mag |
| 1986 | Mari anados antidos de Congressiones | 451 | 09/09/04/09/09/09/09/04/09/09/09/09/09/09/09/09/09/09/09/09/09/ | J#1.500.10.000.00.00.00000 | 24,897 | 10,395 | | •••••••••••••••••• | 57 1 M. (187 M.) 10000 CO. (198 M.) | | 2002 00 00 00 00 00 00 00 00 00 00 00 00 | *************************************** | | NAME OF TAXABLE PARTY. |
| 1987 | -90 | | 2 | | 14,192 | 3,953 | | | | | | | | |
| 1988 | W-104 W156 W516 71 | | | 11.2020710 27.71.27 | 4,199 | 11,986 | Minimal for the Section of | Section of the sectio | 274 | | a market promite supply of | | | beer yearn geograph |
| 1989 | | Januar Robert | | | 1,464 | | | 46 | | or southern to | | | | 440E |
| 1990 1 99 1 | | | The state of the s | eren and | | | | | | pperson govern | 0 | | | (|
| 1991 | | | | ille (MAR), i | | an Ladie | 0 | | | 0 | | | 0 | |
| 1993 | | | 0 | 1 | | 0 | U | | Α | U . | | 0 | U | |
| and the same | | | | | | | | | | | | | | |
| | PERSONAL PROPERTY AND ASSESSMENT OF SEC. | 0 | refriid (ha Tarroad (h | C.08612 | n | 9 | | 0 | v | | | Y | | 1200 |
| 1994 | | 0 | | | | ile harvest (| number o | • | orood year | | | | | |
| 1994 | | 0 | | | | SASSARTTAN LUNIO AN BRANCES | | • | | 195 | | Y | | |
| 1994 1979 | | 0 | | | | ale harvest (| (number o | • | prood year | 125 | | | | |
| 1994 | | <u>0</u> | | | | SASSARTTAN LUNIO AN BRANCES | | • | | 195 | | | | |
| 1994 1979 1980 | | 83 | | | Fema | 4,916 1,661 | | • | 125 4,430 | 904 | | | | - |
| 1994 1979 1980 1981 1982 1983 | | 83 | | | 708 36,546 | 4,916 1,661 65,687 | | • | 125 4,430 6,063 | 904 1,541 | | Y | | *** |
| 1979 1980 1981 1982 1983 1984 | | 83 | | | 708 36,546 13,882 | 4,916 1,661 65,687 6,644 | | f fish) by i | 125 4,430 6,063 4,526 | 904 1,541 361 | | | | |
| 1979 1980 1981 1982 1983 1984 1985 | | 83 | | | 708 36,546 13,882 5,971 | 4,916 1,661 65,687 6,644 10,870 | | • | 125 4,430 6,063 4,526 1,159 | 904 1,541 361 300 | | | | |
| 1994 1979 1980 1981 1982 1983 1984 1985 1986 | | 83 | | | 708 36,546 | 4,916 1,661 65,687 6,644 10,870 14,792 | | f fish) by i | 125 4,430 6,063 4,526 | 904 1,541 361 | | | | |
| 1994 1979 1980 1981 1982 1983 1984 1985 1986 1987 | | 83 | | | 708 36,546 13,882 5,971 20,602 9,395 | 4,916 1,661 65,687 6,644 10,870 14,792 2,717 | | f fish) by i | 125 4,430 | 904 1,541 361 300 | | | | |
| 1994 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 | | 83 632 | | | 708 36,546 | 4,916 1,661 65,687 6,644 10,870 14,792 | | f fish) by i | 125 4,430 6,063 4,526 1,159 | 904 1,541 361 300 | | | | |
| 1994 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | | 83 632 | | | 708 36,546 13,882 5,971 20,602 9,395 | 4,916 1,661 65,687 6,644 10,870 14,792 2,717 | | f fish) by i | 125 4,430 | 904 1,541 361 300 | | · · · · · · · · · · · · · · · · · · · | | |
| 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | | 83 632 | | | 708 36,546 | 4,916 1,661 65,687 6,644 10,870 14,792 2,717 | | f fish) by i | 125 4,430 | 904 1,541 361 300 | | | | |
| 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 | | 83 632 | | | 708 36,546 | 4,916 1,661 65,687 6,644 10,870 14,792 2,717 | | f fish) by i | 125 4,430 | 904 1,541 361 300 | 0 | | | |
| 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 | | 83 632 | | | 708 36,546 | 4,916 1,661 65,687 6,644 10,870 14,792 2,717 | 42 | f fish) by i | 125 4,430 | 904 1,541 361 300 49 | 0 | | 0 | |

Age Group

| | | | | | | | | | A | ge Gro | up | | | | | | | | | |
|----------------------|--|------------------|--|---|---|--|------------------------|-------------------------|----------------|---|-----------------------|------------------------|--------------|--|---|--|-----------------------|---|--|---|
| Year | 0.2 | n | 0.3 | n | 0.4 | n | 1.1 | n | 1.2 | n | 1.3 | n | 1.4 | n | 2.1 | n | 2.2 | n | 2.3 | n |
| | | | | | | | | | *.* | | | | | | | | | | | |
| | | | | | | | Maie a | ige coi | mpositio | n by na | rvest ye | ar | | | | | | | | |
| 1983 | | | | | | | | | 12.57 | 20 | 22.64 | . 36 | | | | | | | | |
| 1984 | | | | | | | | | 55.20 | 122 | 1.81 | 4 | | | | | | | | |
| 1985 | | | | | | | | | 7.06 | | 36.47 | 93 | | | 3 | | | | | |
| 1986 | 30.00 S.A.5.16 | | | | | | | (3) (4) (8) | 53.23 | 214 | 2.98 | 12 | 0.000 | ********* | | | 5.47 | 22 | | |
| 1987 1988 | | | 44 | | | | | | 6.00 | 83 | 38.47 | 441 | 0.11 | 1 | 0.66 | 8 | 1.80 | 21 | 0.25 | 3 |
| 1989 | | | | | | | | | 11.39 | | 22.77 | 92 | 0.11 | 1 | and the second | | 11.14 | 45 | 6.44 | |
| 1990 | 0.13 | 1 | 0.64 | 5 | | tibes for all | × 1851.54. 273.737 | ar Contraction | 35.39 | 327 | 13.61 | 114 | 99998888 | 201207-10160808 | a de la companya de | MARKATAN TANAN | 1.59 | 16 | 0.84 | 7 |
| 1991 | | | | | | | | | 27,41 | 142 | | 400 | | | | | 1.93 | 10 | 1.74 | 9 |
| 1992 | *********** | | National Confession of the Con | ****** | er van omerficiens o | KORON (1984) | | 0.7733006300 | 29.20 | 85 | 27.49 | 80 | MARKET STATE | TO THE OTHER PROPERTY. | | MORROS CONT | | 000000224004 | | |
| 1993 | | esta estado | | | | | | | 5.96 | 000000000000000000000000000000000000000 | 48.79 15.59 | 90.940/2018/2019/39832 | 0.27 | 1 | 0.19 | . 1 | 1.12 | 6 | | |
| 1994 1995 | | | | | | | | | 50.74 15.19 | 144 20 | 38.77 | 44 203 | 0.37 | 1 | | | 0.37 | 1 | 0.37 | 7 |
| 1996 | | | | | | | 0.16 | I | 31.80 | 179 | 16.61 | 94 | | | 124 A W | 6.94 | 0.16 | 1 | V.J. | <i>.</i> |
| 1997 | | | | | | | 0120 | • | 8.30 | 26 | 39.80 | | | | | | 5,120 | | 0.30 | 1 |
| 1998 | | | | | | ************************************** | | | | | | ************ | | | | *********** | | | * | *************************************** |
| | | | | | | | Femal | e age | composit | ion by | harvest | year | | | | | | | | |
| 1983 | | | | | | | | | 35,86 | 57 | 28.93 | 46 | | * | 1507 | | | | | |
| 1983 | | | | | | | | | 41.18 | 91 | 1.81 | 4 | | | | | | | | MARKET |
| 1985 | | | 0.78 | 2 | | | | | 6.66 | | 46.27 | | 0.40 | 1 | | | 1.18 | 3 | 1.18 | 3 |
| 1986 | | //W/02/09/4/W/W/ | | | 200000000000000000000000000000000000000 | | | and the species | 32.84 | 132 | 1.49 | 6 | | | | | 3.98 | 16 | | |
| 1987 | | | ****** | | | | | | | | | | | | | | | | | |
| 1988 | | | | | | | | Section 1997 | 8.46 15.35 | 111 | 40.01 17.08 | 520 69 | | | 0.25 | . 1 | 3.69 11. 63 | 48 47 | 0.55 3.96 | 5 16 |
| 1 989 1990 | | | 0.90 | 7 | | | | | 29.29 | 272 | 15.45 | 125 | | | 0.23 | 1 | 1.65 | 15 | 0.51 | 4 |
| 1991 | | | 0.90 | , | | | | | | | 28.57 | 148 | | | | | 1.55 | 8 | | 3 |
| 1992 | | | | 100000000000000000000000000000000000000 | | | | 40 CAN | 24.06 | 70 | 18.90 | 55 | 2389966666.7 | | | 96362 386 65 6 c. | | 1400 B 22 B 20 B 20 B 20 B 20 B 20 B 20 B | 0.34 | 1 |
| 1993 | | | | | | | | | 5.96 | 32 | 37.80 | | | | | | 0.19 | - 1 | | |
| 1994 | | ersenen er | | 4 Automorphic | v Gardina yang | | | 928-223-2 88 803 | 18.44 | 52 | 13.74 | 39 | | the street | | **** | 0.74 | 2 | A 16 | • |
| 1995 | | | | | | | | | 10.87 33.70 | 37 190 | 34.44 17.41 | 181 98 | | | | Comp. 1 | 0.18 0.16 | 1 · · · · · · · · · · · · · · · · · · · | 0.18 | 1 |
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| 1998 | | | | | | | | SC2-1888 | | . | | 120 | | fier. | | | | 500,000,000 | | |
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| 1986 | | | | | | | | K25-71 (A.S.) | 86.07 | 346 | 4.47 | 18 | | man San | A | | 9.45 | 38 | 004 TIN TIN | 50404T(300E |
| 1987 | | | | | | | | | | | | | | | | | | | | |
| 1988 | Contraction of the Contraction o | | Programme and an annual page. | en and an entered and a | | | resonance and the same | one, canada | | | 78.48 | | 0.11 | 1 | 0.66 | 8 | 5.49 | 69 | 0.80 | 8 |
| 1989 | | | | | | | | | | 108 | 39.85 | | | 34 5 3 44 44 44 | 0.25 | 1. | 22.77 | 0.0000000000000000000000000000000000000 | 10.40 | exc:::::::::::::::::::::::::::::::::::: |
| 1990 | 0.13 | 1 | 1.54 | 12 | | | | RECOVERS | 64.68 | | 29.06 48.65 | | | 7000 SX | | | 3.24 3.48 | 31 | 1.35 2.32 | 11 |
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| 1994 | | | | 2007 846 0 (166) | g Same Disk (Sil) | | | a. 0~0.25% | 69.18 | 196 | 29.33 | 83 | 0.37 | I | man are no college and all | - mexicological | 1.11 | 3 | | |
| 1995 | | | | | | | | | 26.06 | | 73.21 | | | | | | 0.18 | I | 0.55 | 3 |
| 1996 | See and the | -0/0853060494 | 50°45 (882.E. 48+7 | 50 Jaya 1990 | sastrema. | 0.005587** | 0.16 | 1 | 65.51 | | 34.02 | | 888987177 | 30000000000000000000000000000000000000 | 3000000000 | ggara: | 0.32 | 2 | | 7000000 |
| 1 997 1998 | | | An River | | | | | 202. PSE | 19.20 | ou | 80.20 | 230 | | east)iyi | \$2.552,A | | 0.60 | 2 4 | | |
| 1339 | | | | | | | | | | | | | | | | | | | | |

Appendix E. Mikfik: age, and mean length and weight (± Standard Error; SE) of the commercial sockeye salmon catch by brood year and age group. Dashed line indicates no data were collected during that brood/harvest year; italics Indicate escapement data. Calculated means reflect corrections made to previously reported data. *Indicates samples were collected by snagging.

| | | | | | | | | | | | Age (| iroup | | | | | | | | | | |
|-----------------------|-------------------------------|---|---|-------------------|--------------------|---------------------|------------------|---------------------|-------------------|--|---|-------------------------|---|------|-----------------------------|---|---------------|---------------------|---|---|---------------|--------------------|
| Year | 0.3 S | E n 0.4 | SE n | 1.1 SE n | 1.2 | SE | n | 1.3 | SE | n | 1.4 SE n 2. Male mean length (1 | | 2.2 SE | n | 2.3 SE | n 2.4 S | SE n | 3,1 SE | n 3 | .2 SE | n 3.3 | SE n |
| | | . A.J. | u izili ili | Cara and a second | | | | | | | wate mean length (1 | mii) by brood y | | | • * | | | | | | North Section | 47 |
| 1970 1971 | J. 1900 | 400.274 | | | 503* | 15.5 | - 5 | 545* 416 | NA NA | 1 | | | 503* NA 469 NA | | | | | | | | - | |
| 1972 | | | | | 454 | 23.9 | 3 | 48.176 | | ************************************** | | | | | | | | | | | | |
| 1 973 1974 | Audelie ik | | | | | | | 4 | | | | | | | - 20 | | | | and the | | | |
| 1975 1976 | 7.200 | | V-0. | | 503 484 | 11.0 | 15 | 527 | 5.0 | 12 | | | 545 NA | 1 | 517 120 | 7 | | | | | | |
| 1977 | | | | | | 14 | | .519 | 5.0 | 23 | | | | | 517 12.0 | 1 | | | | | | |
| 1978 1979 | . A sala | edwia du Wwa | | varensa i deleta | 499 | | 5 | OSFA V | | un Ç | | | | | Subsection - 150 | | S.Sisiwaya.cz | da Markata | akawa Kal | - i talita ka | 529 | 8 NA 1.0 |
| 1980 1981 | sa rangasa. | man a company and a company | m.m | 14. | | 18.17 No. 100 Ta-24 | | F30 | 2.0 | | 505 1.0 2 | | | | 520 14.0 | 0.000000000000000000000000000000000000 | *** | | | | - 2×0 | . December |
| 1982 | | | | | 457 | 6.0 | 43 | 520 | 2.0 | 117 | | | 448 7.0 | 13 | 515 12.0 | | | | | | | |
| 1983 1984 | K ilo ky | A grand Colored | | | 462 | 2.0 | 130 | 512 533 | 1.0 | | | •• | 479 8.0 493 6.0 | | 535 5,0 510 4.0 | | | | | | | and the |
| 1985 | South C | | | 4 | 475 | 8.0 | 26 | 504 | 3.0 | 88 | | | 471 8.0 | 14 | 501 8.0 | 5 | | | | | | |
| 1986 1987 | - 17 A L | | | | 441 464 | 3,0 4.0 | 98 . 35 | 500 506 | 2.0 1.0 | 160 233 | | | CONTRACTOR | | 491 3.0 516 4.0 | | | | | | | |
| 1988 1989 | e in a transfer in the second | 40.57 - 11. 500 | | | 443 457 | 3.0 | | 516 | | 102 | | | 471 6.0 | 13 | | 2 (a) | | | | 4. 2 | | |
| 1990 | 690 min (52) | and the second | a de la companya de | 316 NA 2 | | | | 515 | 5,0 | 32 | | | 443 18.0 | 2 | 501 7.0 | 4 | | | | | | |
| 1991 1992 | | | | 332 NA 1 | | 6.0 | 18 | 523 | 2.0 | 72 | | | 474 7 | | | | | | | | | • |
| 1993 | . 5 53 N | A 🤾 1 | | | 486 | 8.0 | .19 | | | | | | | | | allowed Table | in Châ | (15 -78- | | | | |
| 1994 | | | | | | | | | | | Female mean length (| mm) by brood | year | | | | | | | | | |
| 1969 | | | | | | | | | | | | | | | | | | | | | | |
| 1970 1971 | 0.2.6.8.55 | | | | /20% | 314 | y | 522 * 497 | NA 9.24 | 1 | | | 462 934 | 4 | • | | | | | | | R. Hofelena |
| 1972 | | 100000 | | | 462 | NA 5.7 | 10 | 47/ | 7.24 | 4 | a parte de la constante de la | | 463 8.21 | 3 | | | | | | | Pilot in the | |
| 19 73 1974 | | | | | | | | | | | | | | | | | | | | , 6 5 , 8 | | |
| 1975 | Maga. | | | | | | | 503 | 6.97 | 23 | | | 448 2.5 | 2 | | | | | | | | |
| 1976 1977 | | | | | 469 | 10.5 | | 513 | 3.91 | 37 | | | | | 522 4.26 | 9 | | | | 7 () () () () () () | 41 E 91 E 1 | |
| 1978 1979 | J. Parken | a. A. Adadasa - A. | a lak sakin | | 483 | | 10 | 1 3 4 5 4 1 4 1 | | N. September | | | | 2000 | | 9.4 | | The strains | | e de la companya de La companya de la co | | |
| 1980 | | | 26 S | | | | | | **** | (1.162.1.S | | | | | 508 10.0 | | | | 46 | 0 NA | | |
| 1981 1982 | 545 N | A 1 | | | 458 | 5.0 | 33 | 512 | 3.0 | 63 | | | 462 4.0 | 15 | 517 NA | 2 | | | | | | |
| 1983 | . 42. | | | | : '' · | | | 511 | 2.0 | | | | | 18 | 525 4,0 | 12 | | | | | | |
| 1984 19 85 | i i i i i i | | | | 458 471 | | 161 27 | 531 511 | 2.0 3.0 | | الوالية | *********************** | and a second contract the second | | 510 4.0 1 | Of the Co March Consensation where a | | | | | | |
| 1986 1987 | 4807 (FRY 1881) | | | | 438 461 | 3.0 3.0 | | 499 5 09 | | 155 198 | | | | | 508 4.0 520 5.0 - | | | | | | | |
| 1988 | | | | | 446 | 3.0 | 22 | 517 | | 108 | | | 467 7.0 | 14 | | | | | | | | ARAGO, FA |
| * 1989 1990 | | ⊷ d i. | | 310 5 8 | | 1.0 | 110 | 502 | 3.0 | 30 | | | 459 17,0 | 3 | 510 . NA | 1 | | | a de la composición | | w.c. | in a second second |
| 1991 | 510 N | A (1 | 1000 1000 1000 1000 1000 1000 1000 100 | . 240 Sec. 1 | . 444 | 5,0 | 27 | | | | 1. | | | 2 | 501. NA 📜 | l | | | | er en en en en en | | |
| 1992 19 93 | op State | · | | | 469 | 8,0 | . 22 | 522 | | 46 | | | 457 10.0 | y | | | | | | | | |
| 1994 | | | | | | | | | | | -contin | | | | | | | | | | | |

| 4 | _ |
|---|---|
| V | 0 |

| V 02 05 01 05 | | Age Group | | | | | |
|--|--|--|--|--------------------------------|----------|----------------------|-----------------|
| Year 0.3 SE n 0.4 SE n 1.1 SE n 1.2 SE n | | SE n 2.1 SE mean weight (kg) by bro | n 2.2 SE n od year | 2.3 SE n | 2.4 SE n | 3.1 SE n | 3.2 SE n 3.3 SE |
| 1969 1970 | | | | | | | |
| 1971 1972 | | | | | | | |
| 1973 1974 | | | | | | | |
| 1975 1976 | | | | | | | |
| 1977 | | | | | | | |
| 1978 1979 | | | | | | | |
| | 1.76 0.03 48.00 | NA 1.00 | 1.20 NA 1.00 | | | | |
| 1982 1.27 0.06 22.00 1983 | 2.21 0.04 41.00 | | 1.53 0.08 4.00 | 2.50 NA 1.00 1.87 0.09 3.00 | | | |
| 1984 1.66 0.08 17.00 1985 0.90 NA 1.00 | 2.06 0.07 25.00 | | | 1.80 NA 1.00 1.64 0.11 2.00 | | | |
| 1986 1.45 0.07 8.00 | | | 1.21 0.14 3.00 | 1.65 0.06 3.00 | | | |
| | 1.70 0.08 9.00 | | Elizabeth de la companya de la comp | 1.78 0.09 4.00 | | Meller de la company | |
| 1990 1991 1.17 0.07 18.00 | 1.93 0.09 32.00 | | 1.27 0.18 2.00 | | | | |
| 1992 0.52 NA 1.00 | | | | | | | |
| 1994 | · · · · · · · · · · · · · · · · · · · | | e and e the | | | ***** | 4.1 |
| | Femal | e mean weight (kg) by bi | ood year | | | | |
| 1969 1970 | | | | | | | • |
| 1971 1972 | | | | 1 | | | |
| 1973 1974 | | | Mary Colored Colored | T. Sister | | | |
| 1975 1976 | | | | | | | |
| 1977 1978 | | | and the second second | 76 12 3 | | | |
| 1979 1980 | ter de la companya d | | 74.57L | 1.52 0.10 2.00 | | | |
| 1981 | 1.62 0.06 22.00 | | 1.13 0.05 5.00 | 1.53 0.18 3.00 | | | |
| 1982 2.00 NA 1.00 1.06 0.06 16.00 | 2.16 0.08 26.00 | | | | | | |
| 1984 1.51 0.04 21.00 1985 1.33 0.33 2.00 | 1.96 0.06 8.00 | and the state of | 1.58 0.08 2.00 1.70 NA 1.00 | 1,60 0.01 3.00 | | | |
| 1986 1.34 0.05 9.00 1987 1.45 0.04 8.00 | 1.70 0.05 23.00 | | 1.31 0.05 12.00 | 1.52 0.12 2.00 1.97 NA 1.00 | | | |
| 1988 0.99 0.04 2.00 1989 121 0.05 18.00 | 1.59 0.05 12.00 | | 1.02 0.04 2.00 | 1.72 NA 1.00 | | | |
| 1990 0.40 NA 1.00 1991 1.71 NA 1.00 1.21 0.05 27.00 | 1.64 0.03 30.00 | | 1.29 0.09 3.00 | | | | |
| | | | | | | | |
| 1992 1993 | | | | | | | |

| | | | | | | | Age Grou | р | | | | | | |
|-----------------------|------|--------------------------|-----|--------|-------------------|----------------|--------------|--------------|--------------|------------------|-----|-----|------|--------------------|
| Year | 0.2 | 0.3 | 0.4 | 1.1 | 1.2 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2.4 | 3.1 | 3.2 | 3.3 |
| | | | | | Male | harvest (nu | mber of fi | ish) by broo | od year | | | | | |
| 1 976 1977 | | | | | | 4552 | | | | 1,386 | 2.0 | | | |
| 1978 1979 | in . | | | | 990 | | 5 | | | | | | | 5 4 4 93 |
| 1980 1981 | | alakan sasaria | | | | 10,869 | 186 | | 1200 | 279 | 0. | | . 0 | 93 7 7 7 4 3 |
| 1982 | , in | | 0 | | 3,995 | . 0 | 0 | | 1208 0 | | | 0 | | |
| 1983 1984 | 0 | 0 | | 0 | 0 2,676 | | | 0 | 352 382 | 314 782 | | | | |
| 1985 1 986 | | - 1-1-1 | | | 355 2,188 | 1,965 3,897 | | | 313 950 | 122 252 | | | | |
| 1987 | | | | | 853 | 1,730 | | | 37 | 37 | | | | |
| 1 988 1989 | | Constitution of the last | | | 141 185 | 197 | Česti, živi, | | 25 | 5 | 0 | | | 0 |
| 1 990 1991 | | | 0 | 4 | 21 | 36 0 | 0-4 | | 2 0 | 0. | | 0 | 0 '* | |
| 1 992 1993 | 0 | 0 | | 1 0 | 0 22 | | | 0 | | | | | | |
| 1994 | | Selfal. | | | | 1,224 | | | 288 | | | | | |
| | | | | | Female | harvest (nu | imber of | fish) by bro | ood year | | | | | |
| 1976 1977 | | | | | | 7,324 | | | | 1,782 | | | | |
| 1978 1979 | | | | | 1,979 | | | | | | | | | |
| 1980 | | | | | | | | | | 372 | 0 | _ | 93 | (! |
| 1981 1982 | | 93 | 0 | | 3,066 | 5,852 0 + | 0 | | 1,394 0 | 0 - 42 | | . 0 | | |
| 1983 1984 | 0 | 0 | | 0 | 0 3,420 | 3,746 2,129 | | 0 | 381 355 | 164 447 | | | | |
| 1985 1986 | | | | | 368 1,629 | 1,541 3,776 | | | 201 1,583 | 292 134 | | | | |
| 1987 | | | | | 1,413 | 1,469 | | | 37 | 29 | | | | |
| 1 988 1989 | | | | | 163 213 | 209 | | | 27 | l | 0 | | | (|
| 1 99 0 1991 | | 1 | 0 | 15 | 31 | 35 0 | 0. | | 3 0 | . 0 | | 0 | |) <u>-</u> |
| 1992 1993 | 0 | 0 | | 0 | 0 26 | 1,296 | | 0 | 792 | | | | - | |
| 1994 | - | 13.4 | | - | | | continued | 1 | | | | | | |

| Year | 0.3 | n n | 0.4 | n 1.1 |). n | 1.2 | n | 1.3 | n 1.4 | Age (| | 2.2 | n | 2.3 | n 2 | 2.4 n | 3.1 | n | 3.2 | n 3. | 3 n |
|-----------------------------|------------------------|---|------------------------|------------|------------------|--|------------------|----------------|-------------------|--|---------------------------------------|------------------------------|----------|---------------------|----------|---------------|--|---------------------------------------|------------------------|---------|--|
| | | | | | Total Company | Acceptance of the Control of the Con | | | Male age | composi | · · · · · · · · · · · · · · · · · · · | | | | | _ | | | | | ·············· |
| 1975 1976 1977 | | | | | | 55.56 13.63 | 5 3 | 4.55 | 1 1 | | | 11.11 4.55 | 1 1 | 18-27 | | | | | | | |
| 1978 1979 | | | | | | | | | | | | | | | | | | | | | |
| 1980 1981 | | | | | | 22.10 | 15 | 17.60 | 12 | | | 1.50 | 1 | | | | | | an and an and a second | | |
| 1982 1983 | | | | | | 5.50 | 5 | 25.27 | 23 | | | | | 7.69 | 7 | | | | | | |
| 1984 1 98 5 | | | | | | | | | | | | | | | | | · | | | | |
| 1986 1 987 | | | | | - | 14.53 | 43 | 39.52 | 117 0.68 | 2 | | 4.39 | 13 | 1.01 | 3 | | | | | 0.3 | 4 1 |
| 1988 1 989 | | | | | | 18.28 5.07 | 130 26 | | | | , | 2.40 5.46 | 17 28 | 0.89 4.49 | | | | | | | |
| 1990 1 99 1 | | | <i>.</i> | | | 24.13 6.62 | | 21.67 30,24 | | | | 3.45 7.37 | 14 39 | 0.95 | | | | | | | |
| 1992 1993 | | | | 0,43 | 3 . 2 | 3.56 19.66 | 19 96 | 43.65 20.94 | 233 102 | | | 0.93 2.66 | 5 13 | 6.36 3.93 | 34 19 | | | | | | |
| 1994 1995 1996 | | | | | | | • | | - | | | | | | | | | | | | |
| 1996 1997 1998 | 0.06 | . 1 | | | - | 10.6 | 19 | 40.20 | 72 | | | 5.00 | 9 | | | 2 | | | | | - |
| | | | | | | | | | Female ag | e compos | ition by l | harvest ye | ear | | | | | | | | |
| 1975 1976 | | | | | | 41.11 45.45 | 1 10 | 11.11 18.18 | 1 | | | 13.64 | 3 | | | | | | | | |
| 1977 1978 | | | | | CHEST LIST SE | 43.43 | 10 | 10.10 | | | | 15.04 | , | | | | | ** | | | |
| 1979 1980 | | | | | | 22.10 | 15 | 33.80 | 23 | - | | 2.90 | ž | | Lan a | . Carrier and | Sans Sans Sans Sans | e e e e e e e e e e e e e e e e e e e | nama anagaan | | |
| 1981 1982 | | | | | | 10.99 | 10 | 40.66 | 37 | | | | | 9.89 | 9 | | | | | | |
| 1983 1984 | | | | | | | | | | | | | | | | | | | | | |
| 1985 1986 | 0.34 | 1 | | | | 11.15 | 33 | 21,28 | 63 | | | 5.07 | 15 | | 4 | | | | 0.34 | 1 | |
| 1987 1988 | | | | - | | 23.36 | 161 | | 181 | | | 2.60 | 18 | | 2 | | | | | <u></u> | _ |
| 1989 1990 | | | | | | 5.26 17.97 | 73 | 17.00 | 1 56 69 | | | 5.07 2.22 | 9 | 4.93 | 12 20 | | | | | | |
| 1991 1992 | | | | | | 10.97 4.11 | 58 22 | | 155 198 | | | 12.28 0.93 | 5 | 3.38 | 12 18 | | | | | | |
| 1993 1994 | | | | 1.55 | 18 | 22.64 | 110 | 22.21 | 108 | | | 2.87 | 14 | 3,08 | 15 | | | | | | |
| 1995 1996 | | | | | | | 22 | | | | - | 5.0 | 9 | 0.60 | 1 | | | | | | - |
| 1997 1998 | | | | | - | 12.3 | 22 | 25.7 | 46 | Poth | Cavac | 3.0 | 7 | | 1 == | | | | | | - |
| 1975 | | | | | | 66 67 | 6 | 22.22 | 7 | Both | <u>SCACS</u> | 11 11 | 1 | | * | | | | | | |
| 1976 | gyacuman sustationalis | 200000000000000000000000000000000000000 | course reconstructions | | | 59.08 | 13 | 22.73 | 5 | | | 18.19 | 4 | | | | | | | | |
| 1978 1979 | | | | | | | | | | | | | | | | | | | | | |
| 1980 | | | | | | 44.20 | 30 | 51.40 | 35 | | | 4.40 | 3 | | | | | | | | |
| 1982 1983 | | | | | | 16.49 | 15 | 65.93 | 60 | | | | | 17.58 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | 1 02 | and the state of t |
| 1986 19 87 | | | | | - | 25.68 | | | 180 0.68 | 2 | <u></u> | 9.46 | | | | | <u></u> | | 0.34 | 1 0.3 | 4 1 |
| 1988 1 989 | | | | 11000 | | 41.64 10.33 | 53 | 52.17 72,31 | 371 | | | | 54 | | | | | | | | |
| 1990 1 991 | 17. | | | | nyazan Calana | 42.10 17.59 | | 38.67 59,54 | | | | 5.67 19.65 1.86 | | | | | | | | | |
| 1992 1993 1994 | | | 7.460.00 7.460.00 | 2.02 | 2 10 | 7.67 42,30 | 41 206 | 80.72 43.15 | | | | 5.53 | 27 | 7.01 | 34 | | en e | | 1 2 2 3 3 4 | | |
| 1995 1996 | | ekw. | | X 2 | | | | | | and the same of th | | | | / | X | | | 04 14 T T T T T | | | |
| 1997 1998 | 0.60 | 1 | | 1.4 (2007) | | 22.9 | 41 | 65.9 | 118 | | * | 10.0 | 18. | 0.60 | 15 | | <u></u> - | | | | |

| | | | | | | Card | Electronic File | Hardsony File | |
|--------------|----------------------|---------------------------|--------------------|-----------------------|------------|------------------------------------|-----------------|----------------------------------|--------------------|
| Year | District | Location | Specie | Sample Type | # of cards | Location | Location | Hardcopy File Location | Comments |
| 1968 | Southern | English Bay | Sockeye | Escapement | 2 | Archive cabinet | | Archive cabinet | |
| 1969 | Eastern | Ress. Bay | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1970 | Southern | McDonald Spit | • | Set net | 2 | Archive cabinet | | Archive cabinet | |
| 1972 1973 | Kamishak Southern | Mikfik Lake Homer Dock | Sockeye Sockeye | Comm Catch Set net | 3 4 | Archive cabinet Archive cabinet | | Archive cabinet | acuth have and mut |
| 1974 | Outer | Port Dick | Chum | Comm Catch | 44.5 | Archive cabinet | | Archive cabinet Archive cabinet | south bay set net |
| 1974 | Outer | Island Cr | Chum | Comm Catch | 100 | Archive cabinet | | Archive cabinet | |
| | Southern | | Sockeye | • Set net - I • | | Archive cabinet | | Archive cabinet | |
| 1974 | | Mikfik Lake | · | Comm Catch | 1 | Archive cabinet | | LAN . | |
| 1975 | Kamishak | | Sockeye | | | | | Archive cabinet | |
| 1975 | Southern | Homer | Sockeye | Set net | 3 | Archive cabinet | | Archive cabinet | set net sites? |
| 1975 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | 2 | Archive cabinet | | Archive cabinet | |
| 1976 | Kamishak | Cottonwood | Chum | Comm Catch | 2 | Archive cabinet | | Archive cabinet | |
| 1976 | Kamiahak | Ursus | Chum | Comm Catch | 2 | Archive cabinet | | Archive cabinet | 100 |
| 1976 | s Southern | English Bay | Sockeye | 47 | | Archive cabinet | | Archive cabinet | |
| 1977 | Kamishak | McNeil River | Chum | Comm Catch | 4 | Archive cabinet | | Archive cabinet | |
| 1977 | Outer | Delight Lake | Sockeye | Escapement | 2 | Archive cabinet | | Archive cabinet | |
| 1977 | Outer | Desire Lake | Sockeye | Escapement | 10 | Archive cabinet | | Archive cabinet | |
| 1978 | Southern | Tütka | Sockeye | Comm Catch | 8 54 | Archive cabinet | | Archive cabinet | |
| 1980 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1982 | a Kamishaks | McNeil River | Chum | Comm Gatch | | Archive cabinet | | Archive cabinet | 4.00 |
| 1982 | Kamisirik | Mikfik Lake | Sockeye | Comm Calon | | Archive cabinet | | Archive cabinet | |
| 1982 | (Camillana) | Silver Breach | Chum | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1983 | Eastern | Aialik | Sockeye | Comm Catch | 8 | Archive cabinet | | Archive cabinet | |
| 1983 | Kamishak | Chenik Lake | Sockeye | Comm Catch | 5 | Archive cabinet | | Archive cabinet | |
| 1983 | Southern | China Poot | Sockeye | Comm Catch | 19 | Archive cabinet | | Archive cabinet | |
| 1983 | Outer | Delight Lake | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1983 | Outer | Desire Lake | Sockeye | Comm Catch | 2 | Archive cabinet | | Archive cabinet | |
| 1983 | Southern | English Bay | Sockeye | Comm Catch | 9 | Archive cabinet | | Archive cabinet | |
| 1983 | Kamishak | Iniskin | Chum | Comm Catch | 9 | Archive cabinet | | Archive cabinet | |
| 1983 | Kamishak | Kamishak Rive | r Chum | Comm Catch | 7 | Archive cabinet | | Archive cabinet | |
| 1983 | Kamishak | McNeil River | Chum | Comm Catch | 32 | Archive cabinet | | Archive cabinet | |
| 1983 | Outer | Nuka Bay | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1983 | Eastern | Tonsina Cr | Chum | Comm Catch | 3 | Archive cabinet | | Archive cabinet | • |
| 1983 | Southern | Tutka | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |

Appendix F. Inventory of Archived Lower Cook Inlet Adult Salmon Scales

| Voor | District | Location | Specie | Sample Type | # of cards | Card Location | Electronic File | Hardcopy File | 2 |
|----------------|--------------------------|------------------------------|---------|-------------|------------|------------------|---|------------------------------------|------------------------|
| Year 1983 | Kamishak | Silver Beach | Sockeye | Comm Catch | # Of Cards | Archive cabinet | Location | Location Archive cabinet | Comments |
| 1983 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1984 | e Eastern | Alalik | Sockeye | Comm Catch | w45 | Archive cabinet | | Archive cabinet | |
| 1984 | Eastern | Alalik | Chum | Comm Catch | 1 1 | Archive cabinet | | Archive cabinet | |
| 1984 | Kamishak | | Sockeye | Comm Catch | 6 | Archive cabinet | | Archive cabinet | |
| 1984 | | China Poot | Sockeye | | 15 | Archive cabinet | | Archive cabinet | |
| 1984 | Kamishak | iniskin | Chum | Comm Catch | 10 | Archive cabinet | | Archive cabinet | |
| 1984 | Southern | Kasitsna | Sockeye | Set net - | | Archive cabinet | | Archive cabinet | Professional Residence |
| 1984 | - Kamishak | Kamishak Rivi | | Comm Catch | 54.9 | Archive cabinet | | Archive cabinet | |
| 1984 | | McNeil River | Chum | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| | Outer | Nuka Bay | Sockeye | Comm Catch | 38-16 | Archive cabinet | | Archive cabinet | |
| 1984 | | | Chum | Comm Catch | | Archive cabinet | e de la companya de | | |
| | Eastern et Sejúnterne | r Ress Bay r Seldavia Bay | Sockeye | Set net and | | Archive cabinet | | Archive cabinet Archive cabinet | |
| 1.510 | Easterrea | Resc Say | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| | Onjerts | RockyE | Chum | Comm Carch | | Archive cabinet | Area Charles Charles (Charles | | |
| | - Kemishak | eursus | Chum | Comm Catch | | Archive cabinet | | Archive cabinet Archive cabinet | 4.00 |
| 1304 | Eastern | Aialik | Sockeye | Comm Catch | 9 | Archive cabinet | | Archive cabinet | |
| 는 1985 1985 | Kamishak | Chenik Lake | Sockeye | Escapement. | 8 | Archive cabinet | | Archive cabinet | |
| 1985 | Southern | China Poot | Sockeye | Comm Catch | 9 | Archive cabinet | | Archive cabinet | |
| 1985 | Outer | Desire Lk | Sockeye | Comm Catch | 13 | Archive cabinet | | Archive cabinet | |
| 1985 | Southern | Kasitsna | Sockeye | Set net | 3 | Archive cabinet | | Archive cabinet | |
| | | - | - | | 1 | Archive cabinet | | | |
| 1985 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | | | | Archive cabinet | |
| 1985 | Outer | Nuka Bay | Sockeye | Comm Catch | 5 | Archive cabinet | | Archive cabinet | no acetate impressions |
| 1985 | Eastern | Tonsina Cr | Chum | Comm Catch | 5 11 | Archive cabinet | | Archive cabinet | |
| 1986 | Kamilalisik | Chenik Jaka | Sockeye | Escapement | | Archive cabinet | | Archive cabinet | acales missing. |
| 1986 | Sequinom | Chilper (166) | Sockeye | Comm Calch | | Archive cabinet | | Archive cabinet | |
| 1986 | . Kamisiiak | McNell River | Chum | Comm Caich | 2 | Archive cabinet | | Archive cabinet | scales missing. |
| 1986 | Southerns | . Kasijisna | Sackeye | Set net | | Archive cabinet | | Archive cabinet | |
| 1986 | Kamisijaka | e.Mikfik.Lake | Sockeye | Comm Calch | 4.4 | Archive cabinet | | Archive cabinet | 2 acetates missing |
| 1988 | Eastern | Aialik | Sockeye | Comm Catch | 14 | Archive cabinet | | Archive cabinet | |
| 1988 | Kamishak | Chenik Lake | Sockeye | Escapement | 36 | Archive cabinet | | Archive cabinet | |
| 1988 | Southern | China Poot | Sockeye | Comm Catch | 30 | Archive cabinet | 7 | Archive cabinet | |

Appendix F. Inventory of Archived Lower Cook Inlet Adult Salmon Scales

| Year | District | Location | Specie | Sample Type | # of cards | Card Location | Electronic File Location | Hardcopy File Location | Comments |
|----------|------------------------------|------------------|-------------|--------------|------------|------------------|--|---------------------------|--|
| 1988 | Kamishak | Cottonwood | Chum | Comm Catch | 12 | Archive cabinet | | Archive cabinet | |
| 1988 | Kamishak | Iniskin | Chum | Comm Catch | 1 | Archive cabinet | | Archive cabinet | |
| 1988 | Kamishak | McNeil River | Chum | Comm Catch | 27 | Archive cabinet | | Archive cabinet | |
| 1988 | Outer | Nuka Bay | Sockeye | Comm Catch | 10 | Archive cabinet | | Archive cabinet | |
| 1988 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | 20 | Archive cabinet | | Archive cabinet | |
| 1988 | Outer | Port Dick | Chum | Comm Catch | 25 | Archive cabinet | | Archive cabinet | |
| 1988 | Kamishak | Silver Beach | Chum | Comm Catch | 13 | Archive cabinet | | Archive cabinet | |
| 1988 | Eastern | Tonsina Cr | Chum | Comm Catch | 21 | Archive cabinet | | Archive cabinet | |
| 1989 | - Eastern : | Alalik data | Sockeye | Comm Catch | 28 | Archive cabinet | | Archive cabinet | 100 |
| 1989 | Kamishak | Chenik Lake | Sockeye | Escapement | . 12. | Archive cabinet | Committee of the Commit | Archive cabinet | The Land |
| 1989 | Southern | China Poot | Sockeye | Comm Catch | 30 | Archive cabinet | | Archive cabinet | |
| 1989 | Kamishak | MIKfik Lake | Sockeva | Comm Catch | 15.5 | Archive cabinet | | Archive cabinet | A STATE OF THE STA |
| 1989; | Oliten . Tr | Nijika Bay | Sockeye | Comm Calcha | 11 | Archive cabinet | 3.1 | Archive cabinet | |
| 1990 | Eastern | Aialik | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1990 | Kamishak | Chenik Lake | Sockeye | Escapement | 13 | Archive cabinet | | Archive cabinet | |
| 1990 | Kamishak | Chenik Lake | Sockeye | Escapement | 12 | Archive cabinet | | Archive cabinet | |
| 1990 | Southern | China Poot | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1990 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | 12 | Archive cabinet | | Archive cabinet | |
| 1990 | Outer | Nuka Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | 7/5/1990 |
| 1990 | Outer | Nuka Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | 7/11/1990 |
| 1991, 1 | Eastern | Alalik | Sockeye | Comm Catch | 15 | Archive cabinet | Settle Committee | Archive cabinet | |
| 1991 | Kamishaka | c Bhun Bay : | - Chum | Comm Catch | Page 2-4 | Archive cabinet | | Archive cabinet | |
| 1991 | Kamishak | Cherik Lake | Sockeye | Escapement | 15 | Archive cabinet | Alternative States | Archive cabinet | |
| 1991: | Kamishak | Cherik Lake | Sockeye | Escapement | 115 | Archive cabinet | | Archive cabinet | |
| 1991: | Southern | China Root | Sockeye | Comm Catch | 151 | Archive cabinet | All the second | Archive cabinet | 7/13/1991 (1975) |
| 1991 | Spuiligrate | exchinate oci // | Sockeye | Comm Calch | 10. | Archive cabinet | | Archive cabinet | 7/18/1991 |
| 1991 | Kamisilak | Didugjas iktvei | : Sockeye : | Comm Catch | 6 | Archive cabinet | | Archive cabinet | |
| 1991 | u Kamishaku | a Kamishak Riv | errChum | - Comm Catch | 27. | Archive cabinet | | Archive cabinet | Property. |
| 1991-142 | Kamishak | Kirchsner Lk | Sockeye | Comm Catch | 15 | Archive cabinet | T | Archive cabinet | |
| 1991 | e Kamishake | Mikiik Lake | Sockeye | Comm Catch | 15 | Archive cabinet | 10 may 1 mg 1 m | Archive cabinet | |
| 1991 | Obliga | Nuka Bay | Sockeye | Comm Catch | 16 | Archive cabinet | | Archive cabinet | |
| 1991 | a Diger ses | Port Dick | Chum | Comm Catch | 2 | Archive cabinet | | Archive cabinet | Programme and the second |

Appendix F. Inventory of Archived Lower Cook Inlet Adult Salmon Scales

| Year | | Location | Specie | Sample Type | # of cards | Card Location | Electronic File Location | Hardcopy File | C |
|--------|-------------------|---------------|----------|----------------|------------|------------------|--|--------------------------|----------------------|
| 199150 | District Outer | Port Dick | Sockeye. | Comm Catch | # 01 Cards | Archive cabinet | Location | Location Archive cabinet | Comments |
| 1992 | Kamishak | Bruin Bay | Chum | Comm Catch | 4 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Chenik Lake | Sockeye | Escapement | 27 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Chenik Lake | Sockeye | Ecapement | 8 | Archive cabinet | | Archive cabinet | |
| 1992 | Southern | China Poot | Sockeye | Comm Catch | 8 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Cottonwood | Chum | Comm Catch | 9 | Archive cabinet | | Archive cabinet | |
| 1992 | Outer | Delight Lake | Sockeye | Comm Catch | 1 | Archive cabinet | | Archive cabinet | |
| 1992 | Southern | English Bay | Sockeye | Escapement | 41 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Kirchsner Lk | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Mikfik Lake | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | McNeil River | Chum | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Silver Beach | Chum | Comm Catch | 7 | Archive cabinet | | Archive cabinet | 7/7/1000 |
| 1992 | Kamishak | Silver Beach | Chum | Comm Catch | 7 | Archive cabinet | | Archive cabinet | |
| 1992 | Kamishak | Silver Beach | Sockeye | Comm Catch | , 15 | Archive cabinet | | Archive cabinet | 773171992 |
| 1993 | Kamishaks | d Chenik Lake | Spckeye | Escapement | 24 | Archive cabinet | THE RESERVE OF THE PERSON OF T | Archive cabinet | E/OE/ADO2 |
| 1993 | * Kamishake | LChenik Lake | Sockeye | Escapement | 115 | Archive cabinet | A Section 1 | Archive cabinet | 7/1/1993 |
| 1993 | Southern # | China Poot | Sackeye | Comm Catch | - 8 | Archive cabinet | January Commission (Commission Commission Commission Commission Commission Commission Commission Commission Co | Archive cabinet | |
| 1993 | Southern | - English Bay | Sockeye | Escapement | 44 | Archive cabinet | | Archive cabinet | |
| 1993 | Kamishak | Kirchsnect.k | Sockeye | Comm Catch = 1 | 45 | Archive cabinet | | Archive cabinet | |
| 1993 | Solinem | Neptune Bay | -Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1993 | Kamishak | ⊵ Mikîk Lake | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1993 | Outer | Nuka Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1993. | Kamishak | | Sackeve | _Comm Catch | 6 | Archive cabinet | | Archive cabinet | |
| 1994 | Kamishak | Chenik Lake | Sockeye | Escapement | 11 | Archive cabinet | | Archive cabinet | |
| 1994 | Southern | China Poot | Sockeye | Comm Catch | 11 | Archive cabinet | | Archive cabinet | |
| 1994 | Southern | English Bay | Sockeye | Escapement | 1 | Archive cabinet | | Archive cabinet | |
| 1994 | Southern | Hazel Lake | Sockeye | Escapement | 1 | Archive cabinet | | Archive cabinet | 4 fish sample |
| 1994 | Kamishak | Kirchsner Lk | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | 1 |
| 1994 | Kamishak | McNeil River | Chum | Test Fish | 2 | Archive cabinet | | | Fish taken in Lagoon |
| 1994 | Southern | Neptune Bay | Sockeye | Comm Catch | 5 | Archive cabinet | | Archive cabinet | |
| 1994 | Outer | Nuka Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1994 | Outer | Nuka Bay | Sockeye | Escapement | 3 | Archive cabinet | | Archive cabinet | Delight Lake |

S

Appendix F. Inventory of Archived Lower Cook Inlet Adult Salmon Scales

| Year | District | Location | Specie | Sample Type | # of cards | Card Location | Electronic File Location | Hardcopy File Location | Comments |
|--------|---------------|-----------------|------------|--------------|------------------|------------------|--|---------------------------|-----------------------|
| 1994 | Outer | Nuka Bay | Sockeye | Escapement | 3 | Archive cabinet | | Archive cabinet | Desire Lake |
| 1994 | Outer | Nuka Bay | Sockeye | Escapement | 2 | Archive cabinet | | Archive cabinet | Delusion Lake |
| 1994 | Eastern | Ress. Bay | Sockeye | Comm Catch | 13 | Archive cabinet | | Archive cabinet | |
| 1994 | Kamishak | Silver Beach | Sockeye | Comm Catch | 11 | Archive cabinet | | Archive cabinet | |
| 1995 | Eastern | +-Alalik | Sockeye | Comm Catch | r _{e (} | Archive cabinet | | Archive cabinet | |
| 1995 | Kamishak . | Chenil Lake | Sockeye | Escapement | 1118 | Archive cabinet | 4.0 | Archive cabinet | |
| 1995- | Southern : | Chiha Poot | Sockeye | Comm Catch | # N7 M | Archive cabinet | the Company | Archive cabinet | 7/28/1995 |
| 1995 | Southern # | China Poot | Sockeye | Comm Catch 4 | 447 | Archive cabinet | CILI NAME OF STREET | Archive cabinet | 8/2/1995 |
| 1995 | Outer - | - Delight Lake√ | Sockeye | Escapement | -43 | Archive cabinet | | Archive cabinet | |
| 1995 | Kamishak | Kirchsner Ek | Sockeye | Comm Catch | 16 1 | Archive cabinet | All the second second second | Archive cabinet | |
| 1995 | Kamishak | d Mikfik Lake | Sockeye | Comm Calche | 4 | Archive cabinet | and the same | Archive cabinet | |
| 995 | Kamishak | Michell Rivers | Ghum - | Comm Catch | es got 14 See | Archive cabinet | | Archive cabinet | 100 |
| 1995 | Southern ** | Neptune Bay | Sockeye | Comm Catch | 1816 | Archive cabinet | | Archive cabinet | and the second |
| 1995 | Outer | Noka Bayes | Sackeye - | Comm Catchi- | 15 | Archive cabinet | e de la companya de | Archive cabinet | 6/27/1995 |
| 995 | (c) (ie) | Marka Dav | Sockeye | Comm Catch | 15.4 | Archive cabinet | | Archive cabinet | 6/30/1995 . 3 3 3 3 3 |
| [0]0]6 | Solojvicie (S | Nuka Bay | Stockeyers | Comm Catch C | 100 | Archive cabinet | Contraction of | Archive cabinet | 7/11/1895 - 48 3985 |
| (00) | i kasikana s | Rens Stay | Sockeye | Comm Catch | 340 | Archive cabinet | Section 1 | Archive cabinet | Section 1 |
| (8)95) | Edition | Pleas Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1996 | Kamishak | Chenik Lake | Sockeye | Escapement | 23 | Archive cabinet | | Archive cabinet | |
| 996 | Southern | China Poot | Sockeye | Comm Catch | 16 | Archive cabinet | | Archive cabinet | |
| 996 | Kamishak | Kirchsner Lk | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 996 | Kamishak | McNeil River | Chum | Comm Catch | 6 | Archive cabinet | | Archive cabinet | |
| 996 | Southern | English Bay | Sockeye | Escapement | 15 | Archive cabinet | | Archive cabinet | Cost Recovery |
| 1996 | Southern | Neptune Bay | Sockeye | Comm Catch | 11 | Archive cabinet | | Archive cabinet | |
| 1996 | Outer | Nuka Bay | Sockeye | Comm Catch | 11 | Archive cabinet | | Archive cabinet | Delight Lk escapemer |
| 1996 | Eastern | Ress. Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | 6/4/1996 |
| 996 | Eastern | Ress. Bay | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 097/ | Easters | C'Aialle | Sockeye | Comm Calch | 7 | Archive cabinet | areas areas and the | Archive cabinet | CONTRACTOR |
| ice 7 | Kamishak | Chenik Lake | Sockeye | Escapement | 15 | Archive cabinet | | Archive cabinet | 4.0 |
| 997 | Southern | Chinasi 2001 | Sockeye . | Comm Catch | 7. | Archive cabinet | A CONTRACTOR OF THE PARTY OF TH | Archive cabinet | 7/8/1997 |
| 997 | Southern | China Poor | Sackeyes | Comm Catch | 7 - | Archive cabinet | | Archive cabinet | 7/11/1997 |
| leler/ | | (a) alight sake | | Escapement 4 | 19 72 | Archive cabinet | and the second | Archive cabinet | EVOS projections |

Appendix F. Inventory of Archived Lower Cook Inlet Adult Salmon Scales

| | | | | | | Card | Electronic File | Hardcopy File | |
|-----------|----------------|---------------------------------------|------------|-----------------|--------------------|-----------------|--|-----------------|--|
| Year | District | Location | Specie | Sample Type | # of cards | Location | Location | Location | Comments |
| 1997 | S. Outles etc. | & Desire Lake | #Sockeyee | ⊁Escapement € € | 21. | Archive cabinet | era basis biyar biyar d | Archive cabinet | EVOS project |
| 1997 | e Kamishaki | eeMiktik Lake | Sackeye | Comm Catch | 6 | Archive cabinet | Committee of the second | Archive cabinet | |
| 19976 | Station ca | a Nepture Bay. | Sockeye | Comm Catch | 13 | Archive cabinet | e installed to the | Archive cabinet | |
| 1997 | Bastem | Ress Bay | C Sockeye | Comm Catch | 6 | Archive cabinet | an 1985 (1986) 1986 (1986) | Archive cabinet | 1970 A 4 (2) 18 (1971) |
| 1997 - 4- | : AKamishak | Silver Beach | Sockeye | Comm Gatch | 15 | Archive cabinet | | Archive cabinet | must be a second |
| 1998 | Eastern | Bear Creek | Sockeye | Escapement | 54 | Archive cabinet | | Archive cabinet | From CIAA |
| 1998 | Southern | China Poot | Sockeye | Comm Catch | 15 | Archive cabinet | | Archive cabinet | |
| 1998 | Outer | Delight Lake | Sockeye | Escapement | 20 | Archive cabinet | | Archive cabinet | Escapement project |
| 1998 | Outer | Desire Lake | Sockeye | Comm Catch | 3 | Archive cabinet | | Archive cabinet | |
| 1998 | Eastern | Grouse Lake | Sockeye | Escapement | 24 | Archive cabinet | | Archive cabinet | poor quality, 7/20/98 |
| 1998 | Eastern | Grouse Lake | Sockeye | Escapemenet | 25 | Archive cabinet | | Archive cabinet | 8/15/1998 |
| 1999 | s Southerns | China Pople | Sackeye | Comm Catch | 16 | Archive cabinet | | Archive cabinet | 10 10 10 10 10 10 10 10 10 10 10 10 10 1 |
| 1999 🗱 🗎 | Kamishak | Miktik Lake | Sockeye | Comm Catch | 14 | Archive cabinet | resident i la professione | Archive cabinet | |
| 1999 | • Kamishak | e Kironaner III | Stockeye | Comm Catch | 11.597 | Archive cabinet | the product of the delication. | Archive cabinet | 482 |
| 1999 | o Outer | dibaja Lake | Sockeye | Comm Catches | 15 | Archive cabinet | | Archive cabinet | |
| 1999 | Onter | e Dolignatiake : | Stackeye | Escapement | 20.07 (10 | Archive cabinet | | Archive cabinet | |
| 57 | (QUIT) | i i i i i i i i i i i i i i i i i i i | Postorija. | a Escapement . | AND AND ASSESSMENT | Archive cabinet | Complete Com | Archive cabinet | |

Appendix G. Inventory of Lower Cook Inlet Sockeye and Chum salmon AWL data, 1983 through 1998.

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|-------------------------------|------|---------------------------------------|------|-------------|----------|------|------|------|------|------|------|------|---------------------------------------|-------|---------------------------------------|--------------|
| | С | С | C | С | | С | С | C | С | С | С | С | С | С | С | С |
| SOCKEYE | | | | | | | | | | | | | | | | |
| China Poot | | | | | | | | | | | C | C,E | С | С | С | |
| Neptune Bay | С | | | | | | | | | Е | Е | E | | Е | · · · · · · · · · · · · · · · · · · · | |
| English Bay | С | С | Е | C | | Е | Е | Е | E | E | E | Е | Е | Е | | |
| Chenik Lk | | С | С | | | С | С | С | С | | С | С | С | | | |
| E. Nuka Bay | | | _ | | | | | | | С | | Е | E | E | Е | Е |
| Delight Lake | Е | · · · · · · · · · · · · · · · · · · · | С | | | | | | | | | E | | | E | C |
| Desire Lk | | | | | | | | | С | C | С | С | С | C | | |
| Kirschner Lk | C | С | С | | | С | С | С | С | | | | C | | С | |
| Aialik | | | | | | | | | | | | | | | | Е |
| Grouse Lake | | С | | | | | | | | | | C | С | С | C | |
| Resurrection Bay | | | | | | | | | | - | | | | | | C |
| Resurrection Bay (Bear Lk) | | | | | | | | | С | | | | | | | - |
| Douglas River | С | | | | | | | | | С | С | C | | | C | |
| Silver Beach | С | | С | С | | С | С | С | С | C | C | | С | ***** | C | |
| Mikfik Lake | | | | | | | | | | | | | | | | |
| CHUM | С | С | | С | | C | • | | | С | | C | С | Е | | |
| | | | | | | | | | | | | | | | | |
| McNeil River | | | | | | С | | | | C | | | | | | |
| Cottonwood Cr | | | | | <u> </u> | С | | | | С | | | | | | |
| Silver Beach | С | С | | | | С | | | | | | | | | | |
| Iniskin River | С | | C | | | С | | | ··· | | | | | | | |
| Tonsina Cr. | | C | | | | | | | | | | | | | | |
| Aialik Bay | С | С | | | | | | | C | | · . | | | | | |
| Kamishak River | | С | | | | | | | | | | | | | | |
| Resurrection Bay | | | | | | С | | | C | | | | | | | |
| Port Dick Bay | | | | | | | | С | | С | | | | | | |
| Bruin Bay | | С | | | | | | | | | | | · · · · · · · · · · · · · · · · · · · | | | |
| Rocky Bay | | C | | | | | | | | | | | | | | |

Appendix H. Names and locations of files used to generate this report. All files are stored on the hard drive of the Dell Dimension XPS H233 research computer (property number 10074778), and backed up on 3.5" floppy diskettes and/or zip disks.

| File name | Subdirectory | Format | Description |
|-------------------|-----------------------|---------|--|
| 98salmawl.rir.doc | D:\REPORTS\SALMON\AWL | Word 97 | Text, tables and figures (minus appendices) for the 1998 LCI salmon AWL Regional Information Report. |
| 98Appendix-A.doc | D:\REPORTS\SALMON\AWL | Word 97 | China Poot age, mean weight and length by brood year and age group. |
| 98Appendix-B.doc | D:\REPORTS\SALMON\AWL | Word 97 | Delight Lake age, mean weight and length by brood year and age group. |
| 98Appendix-C.doc | D:\REPORTS\SALMON\AWL | Word 97 | Desire Lake age, mean weight and length by brood year and age group. |
| 98Appendix-D.doc | D:\REPORTS\SALMON\AWL | Word 97 | Bear Lake age, mean weight and length by brood year and age group. |
| 98Appendic-E.doc | D:\REPORTS\SALMON\AWL | Word 97 | Grouse Lake age, mean weight and length by brood year and age group. |
| 98Appendix F.doc | D:\REPORTS\SALMON\AWL | Word 97 | Adult salmon scale archive |
| 98Appendix-G.doc | D:\REPORTS\SALMON\AWL | Word 97 | Report location(s) |

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